

CPFL Energy INC
Form 20-F
April 22, 2019

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 20-F

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934**

**for the fiscal year ended December 31, 2018
Commission File Number 1-32297**

CPFL ENERGIA

S.A.

(Exact name of registrant as specified in its charter)

CPFL ENERGY INCORPORATED
(Translation of registrant's name into English)

The Federative Republic of Brazil
(Jurisdiction of incorporation or organization)

**Rodovia Engenheiro Miguel Noel Nascentes Burnier, 1,755, km 2,5
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Campinas
São Paulo - 13088 140**

(Address of principal executive offices)

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Federative Republic of Brazil

(Name, telephone, e-mail and/or facsimile
number and address of company contact person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class:

Name of each exchange on which
registered:

Common Shares, without par value*
**American Depositary Shares (as evidenced by
American Depositary Receipts), each representing 2
Common Shares**

New York Stock Exchange

*Not for trading, but only in connection with the registration of American Depositary Shares, pursuant to the requirements of the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

As of December 31, 2018, there were 1,017,914,746 common shares, without par value, outstanding

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No T

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934.

Yes No T

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes T No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes T No N/A

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of “large accelerated filer,” “accelerated filer,” and “emerging growth company” in Rule 12b-2 of the Exchange Act:

Large Accelerated Filer Accelerated Filer T Non-accelerated Filer Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards[†] provided pursuant to Section 13(a) of the Exchange Act.

[†] The term “new or revised financial accounting standard” refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP IFRS T Other

If “Other” has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No T

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FORWARD-LOOKING STATEMENTS

This annual report contains information that constitutes forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Many of the forward-looking statements contained in this annual report can be identified by the use of forward-looking words, such as “believe,” “may,” “aim,” “estimate,” “continue,” “anticipate,” “will,” “intend,” “plan,” “expect” and “potential,” among others. Forward-looking statements include information concerning our possible or assumed future results of operations, business strategies, financing plans, competitive position, industry environment, potential growth opportunities, the effects of future regulation and the effects of competition. Those statements appear in a number of places in this annual report, principally under the captions “Item 3. Key Information—Risk Factors,” “Item 4. Information on the Company” and “Item 5. Operating and Financial Review and Prospects.” We have based these forward-looking statements largely on our current beliefs, expectations and projections about future events and financial trends affecting our business. Many important factors, in addition to those discussed elsewhere in this annual report, could cause our actual results to differ substantially from those anticipated in our forward-looking statements. These factors include:

- general economic, political, demographic and business conditions in Brazil and particularly in the markets we serve;
- changes in applicable laws and regulations, as well as the enactment of new laws and regulations, including those relating to regulatory, corporate, environmental, tax and employment matters; actions taken by our controlling shareholder;
- electricity shortages;
- changes in tariffs;
- our inability to generate electricity due to water shortages, transmission outages, operational or technical problems or physical damages to our facilities;
- potential disruption or interruption of our services;
- interest rate fluctuation, inflation and exchange rate variation;
- the early termination of our concessions to operate our facilities;
- increased competition in the power industry markets in which we operate;
- our inability to implement our capital expenditure plan, including our inability to arrange financing when required and on reasonable terms;
- changes in consumer demand;
- existing and future governmental regulations relating to the power industry; and
- the risk factors discussed under “Item 3. Key Information—Risk Factors,” beginning on page 5.

Forward-looking statements speak only as of the date they were made, and we undertake no obligation to update or to revise them after we distribute this annual report because of new information, future events or other factors. In light of these limitations, you should not place undue reliance on forward-looking statements contained in this annual report.

CERTAIN TERMS AND CONVENTIONS

A glossary of electricity industry terms is included in this annual report, beginning on page 158.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Unless the context otherwise requires, all references herein to “we,” “us” or “our company” are references to CPFL Energia S.A., its consolidated subsidiaries and jointly controlled entities.

All references herein to “*real*,” “*reais*” or “R\$” are to the Brazilian *real*, the official currency of Brazil. All references to “U.S. dollars,” “dollar” or “US\$” are to U.S. dollars, the official currency of the United States.

We maintain our books and records in *reais*. We prepared our audited annual consolidated financial statements included in this annual report in accordance with IFRS, as issued by the IASB. Certain figures included in this annual report have been rounded; accordingly, figures shown as totals in certain tables may not be an exact arithmetic aggregation of the figures that precede them.

ITEM 1. Identity of Directors, Senior Management and Advisers

Not applicable.

ITEM 2. Offer Statistics and Expected Timetable

Not applicable.

ITEM 3. Key Information

Selected Financial and Operating Data

The tables below contain a summary of our financial data as of and for the years ended December 31, 2018, 2017, 2016, 2015 and 2014. Our financial data as of December 31, 2018 and 2017 and for each of the three years in the period ended December 31, 2018, 2017 and 2016 was derived from our audited annual consolidated financial statements, which appear elsewhere in this annual report and were prepared in accordance with IFRS, as issued by the IASB. You should read this selected financial data in conjunction with our audited annual consolidated financial statements and the related notes included in this annual report. Our financial data as of December 31, 2015 and 2014 and for each of the two years ended December 31, 2015 and 2014 was derived from our audited annual consolidated financial statements that are not included in this annual report.

The following standards became effective on January 1, 2018 and have impacted our financial information as of and for the year ended December 31, 2018:

- IFRS 9 – Financial Instruments
- IFRS 15 – Revenue from contracts with customers

As permitted by these IFRS standards, we adopted these standards as of January 1, 2018, without restating comparative information presented in the audited consolidated financial statements. Therefore, financial information as of and for the year ended December 31, 2018 is not comparable with the financial information for previous periods. For further information about the adoption of these standards with respect to our financial statements as of and for the year ended December 31, 2018, see Note 3.17 of our audited consolidated financial statements.

The financial information presented in this annual report should be read in conjunction with our consolidated financial statements.

The following tables present our selected financial data as of and for each of the periods indicated.

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STATEMENT OF OPERATIONS DATA

	For the year ended December 31,					
	2018 ⁽³⁾ US\$	2018 R\$	2017 R\$	2016 R\$	2015 ⁽⁴⁾ R\$	2014 ⁽⁴⁾ R\$
	(in millions, except per share and per ADS data)					
Net operating revenue	7,646	28,137	26,745	19,112	20,599	17,399
Cost of electric energy services:						
Cost of electric energy	4,847	17,838	16,902	11,200	13,312	10,643
Cost of operation	743	2,734	2,771	2,249	1,907	1,672
Services rendered to third parties	482	1,775	2,075	1,357	1,049	946
Gross operating income	1,573	5,789	4,998	4,306	4,331	4,138
Operating expenses:						
Allowance for doubtful accounts	46	169	155	176	127	84
Sales expenses	119	439	435	371	338	319
General and administrative expenses	268	987	947	849	863	774
Other operating expense	132	485	438	387	358	328
Income from electric energy service	1,008	3,708	3,022	2,523	2,645	2,633
Interest in associates and joint ventures.	91	334	312	311	217	60
Financial income (expense):						
Income	207	762	880	1,201	1,143	786
Expense	(507)	(1,865)	(2,368)	(2,654)	(2,551)	(1,969)
Net financial income (expenses)	(300)	(1,103)	(1,488)	(1,453)	(1,408)	(1,183)
Income before taxes	799	2,940	1,847	1,381	1,454	1,511
Social contribution	(58)	(214)	(169)	(151)	(160)	(169)
Income tax	(152)	(560)	(435)	(351)	(419)	(455)
Total taxes	(210)	(774)	(604)	(501)	(579)	(624)
Net income	589	2,166	1,243	879	875	886
Net income attributable to controlling shareholders	559	2,058	1,180	901	865	949
Net income (loss) attributable to non-controlling shareholders	29	108	63	(22)	10	(63)
Earnings per share attributable to controlling shareholders ⁽¹⁾ :						
Basic	0.55	2.02	1.16	0.89	0.85	0.93
Diluted	0.55	2.01	1.15	0.87	0.83	0.92
Net income per ADS:						
Basic	1.10	4.04	2.32	1.77	1.70	1.86
Diluted	1.09	4.02	2.30	1.74	1.66	1.83
Dividends ⁽²⁾	133	489	280	214	205	977
Weighted average of number of common shares (in millions) ⁽¹⁾	277	1,018	1,018	1,018	1,018	1,018

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Dividends per share ⁽¹⁾⁽²⁾	0.13	0.48	0.28	0.21	0.20	0.96
Dividends per ADS ⁽²⁾	0.26	0.96	0.55	0.42	0.40	1.92

(1) Reflects the capital increases that took place on April 29, 2015, and April 29, 2016 through the issuance of 30,739,955 and 24,900,531 shares, respectively. In accordance with IAS 33, when there is an increase in the number of shares without an increase in issued capital, the number of shares is adjusted retrospectively for all prior periods presented.

(2) “Dividends” represent the total amount of dividends from net income for each period indicated, subject to approval of the shareholders at the general shareholders’ meeting to be held in the following year.

(3) Translated at the commercial selling rate at closing for the purchase of U.S. dollars, as reported by the Brazilian Central Bank, as of December 31, 2018 of R\$3.875 to US\$1.00. The average of the month-end commercial selling rates during the year 2018 was R\$3.680 to US\$1.00.

(4) Data for 2014 and 2015 have been restated to reflect a change in presentation of the line item representing Changes in expected cash flows from Concession Financial Assets, which relates to our Distribution segment. Since January 1, 2016 this line item has been included in Other operating revenues, within Net operating revenue, together with the other income related to the core activity of the asset. This item was previously presented as part of Net financial expense. We believe the new presentation more accurately reflects the business model of electricity distribution and provides a better representation of our operational and financial performance. The reclassification does not affect total assets, equity, net income or cash flows.

BALANCE SHEET DATA

	For the year ended December 31,					
	2018 ⁽²⁾ US\$	2018 R\$	2017 R\$	2016 R\$	2015 R\$	2014 ⁽³⁾ R\$
	(in millions)					
Current assets:						
Cash and cash equivalents	488	1,891	3,250	6,165	5,683	4,357
Consumers, concessionaires and licensees	1,174	4,548	4,301	3,766	3,175	2,251
Derivatives	80	309	444	163	627	23
Sector financial assets	343	1,331	211	-	1,464	611
Other current assets	341	1,322	1,375	1,285	1,559	1,972
Total current assets	2,426	9,402	9,581	11,379	12,509	9,215
Noncurrent assets:						
Accounts receivable	194	753	237	203	129	123
Derivatives	90	348	204	641	1,651	585
Sector financial assets	58	224	355	-	490	322
Financial asset of concession	1,917	7,430	6,546	5,363	3,597	2,835
Investments in joint-ventures	253	980	1,002	1,494	1,248	1,099
Property, plant and equipment	2,440	9,457	9,787	9,713	9,173	9,149
Contract asset – in progress	270	1,046	-	-	-	-
Intangible Assets	2,442	9,463	10,590	10,776	9,210	8,930
Other noncurrent assets	802	3,109	2,982	2,602	2,525	2,887
Total noncurrent assets	8,467	32,810	31,702	30,792	28,024	25,930
Total assets	10,893	42,212	41,283	42,171	40,532	35,144
Current liabilities:						
Short-term debt ⁽¹⁾	868	3,363	5,293	3,429	3,641	3,526
Sector financial liabilities	-	-	40	598	-	22
Other current liabilities	1,304	5,052	6,046	4,992	5,884	3,869
Total current liabilities	2,172	8,415	11,379	9,018	9,525	7,417
Noncurrent liabilities:						
Long-term debt ⁽¹⁾	4,391	17,013	14,876	18,733	18,093	15,637
Sector financial liabilities	12	47	8	317	-	-
Other long-term liabilities	1,085	4,204	3,834	3,729	2,785	2,693
Noncurrent liabilities	5,488	21,264	18,718	22,780	20,877	18,330
Non-controlling interest	586	2,270	2,225	2,403	2,456	2,454
Net equity attributable to controlling shareholders	2,648	10,263	8,962	7,970	7,674	6,944
Total liabilities and shareholders' equity	10,893	42,212	41,283	42,171	40,532	35,144

(1) Short-term debt and long-term debt include loans and financing, debentures, accrued interest on loans, financing and debentures and derivatives.

(2) Translated at the commercial selling rate at closing for the purchase of U.S. dollars, as reported by the Brazilian Central Bank, as of December 31, 2018 of R\$3.875 to US\$1.00.

(3) Data for 2014 has been restated due the completion of the accounting for the purchase price allocation related to acquisition of Dobrevê Energia S.A., or DESA.

OPERATING DATA

	For the year ended December 31,				
	2018	2017	2016	2015	2014
Energy sold (in GWh):					
Residential	19,618	19,122	16,473	16,164	16,501
Industrial	13,834	14,661	13,022	12,748	14,144
Commercial	10,211	10,220	9,720	9,259	9,437
Rural	3,583	3,762	2,474	2,152	2,326
Public administration	1,459	1,456	1,271	1,278	1,295
Public lighting	2,003	1,964	1,746	1,649	1,622
Public services	2,348	2,157	1,840	1,797	1,861
Own consumption	34	34	32	33	34
Total energy sold to Final Consumers	53,091	53,376	46,578	45,082	47,221
Electricity sales to wholesalers (in GWh)	27,334	27,557	21,459	17,971	14,988
Total consumers (in thousands)⁽¹⁾	9,580	9,375	9,222	7,751	7,585
Installed Capacity (in MW) ⁽²⁾	3,272	3,284	3,259	3,164	3,162
Assured Energy (in GWh) ⁽³⁾	13,420	13,682	14,188	13,550	13,566
Energy generated (in GWh) ⁽⁴⁾	10,648	10,137	12,568	14,310	13,658

(1) Represents active consumers (meaning consumers who are connected to the Distribution Network), rather than consumers invoiced at period-end.

(2) Commencing in 2016 we ceased to account for installed capacity of the Carioba (36 MW) thermoelectric plant and SHPP Cariobinha (1.3 MW), since these facilities are no longer active.

(3) Refers to Assured Energy in GW available at the end-period, multiplied by the number of hours per year. See “Item 4. Information on the Company” for more information about commencement of operations of each power plant.

(4) Refers solely to the total amount of energy (GWh) produced by conventional management companies and the equivalent participation percentage of renewable energy generation companies (51.56% in 2018, 51.60% in 2017 and 2016 and 51.61% in 2015 and 2014).

Convenience Translations into U.S. Dollars

Solely for the investor’s convenience, we have translated certain amounts included in this annual report from *reais* into U.S. dollars at the commercial selling rate at closing for the purchase of U.S. dollars, as reported by the Brazilian Central Bank, as of December 31, 2018 of R\$3.875 to US\$1.00. The translated amounts have been rounded. These translations should not be considered as a representation that any such amounts have been, could have been or could be converted into U.S. dollars at that or at any other exchange rate, as of those dates or any other date. In addition, the translations should not be construed as a representation that the amounts translated into U.S. dollars are in accordance with generally accepted accounting principles.

RISK FACTORS

Risks Relating to Our Operations and the Brazilian Power Industry

We are subject to comprehensive regulation of our business, which fundamentally affects our financial performance.

Our business is subject to extensive regulation by various Brazilian regulatory authorities, particularly ANEEL. ANEEL regulates and oversees various aspects of our business and establishes our tariffs. If we are obligated by ANEEL to make additional and unexpected capital investments and are not allowed to adjust our tariffs accordingly, if ANEEL does not authorize the recovery of all costs or if ANEEL modifies the regulations related to tariff adjustments, we may be adversely affected.

In addition, both the implementation of our strategy for growth and our ordinary business may be adversely affected by governmental actions such as changes to current legislation, the termination of federal and state concession programs, creation of more rigid criteria for qualification in public energy auctions, or a delay in the revision and implementation of new annual tariffs.

If regulatory changes require us to conduct our business in a manner substantially different from our current operations, our operations, financial results and our capacity to fulfill our contractual obligations may be adversely affected.

The regulatory framework under which we operate is subject to legal challenge.

The Brazilian government implemented fundamental changes in the regulation of the power industry in legislation passed in 2004 known as the *Lei do Novo Modelo do Setor Elétrico*, or New Regulatory Framework. Challenges to the constitutionality of the New Regulatory Framework are still pending before the Brazilian Federal Supreme Court (*Supremo Tribunal Federal*), although preliminary injunctions have been dismissed. It is not possible to estimate when these proceedings will be finally decided. If all or part of the New Regulatory Framework were held to be unconstitutional, there would be uncertain consequences for the validity of existing regulation and the further development of the regulatory framework. The outcome of the legal proceedings is difficult to predict, but it could have an adverse impact on the entire energy sector, including our business and results of operations. Due to the duration of the lawsuit, it is possible that the Brazilian Federal Supreme Court will not give retroactive effect to its decision, but rather preserve the validity of past acts applying a judicial practice known as modulation of effects.

If the regulatory framework under which we operate is revised in a way that results in us being required to conduct our business in a manner substantially different from our current operations, our operations, financial results and our capacity to fulfill our contractual obligations may be adversely affected.

We are uncertain as to the renewal of our concessions and authorizations.

We carry out our generation, transmission and distribution activities pursuant to concession agreements entered into with the Brazilian government. Our concessions range in duration from 20 to 35 years. The Brazilian Federal constitution requires all concessions relating to public services to be awarded through public tender. Under laws and regulations specific to the electric energy sector, the Brazilian government may renew existing concessions for an additional period of up to 20 or 30 years, depending on the nature of the concession, without public tender, provided that the concessionaire has met minimum performance, financial and other relevant standards, and provided that the proposal is otherwise acceptable to the Brazilian government. The Brazilian government has considerable discretion under the Concession Law, Law No. 9,074/95, Decree No. 7,805/12, Law No. 12,783/13, Decree No. 8,461/15, Law No. 13,360/16, Decree No. 9,158/17, Decree No. 9,187/17 and under concession contracts regarding renewal of concessions. Furthermore, we may also be subject to new regulations enacted by the Brazilian government that could retroactively affect the rules for renewal of our concessions and authorizations.

The non-renewal of any of our concessions and authorizations could have a material adverse effect on our financial condition, results of operations and our capacity to fulfill our contractual obligations.

The tariffs that we charge for sales of electricity to Captive Consumers and the tariffs for using the distribution system that we charge to Free and Special Consumers are determined by ANEEL pursuant to concession agreements with the Brazilian government, so our operating revenues could be adversely affected if ANEEL makes decisions relating to our tariffs that are not favorable to us.

ANEEL has substantial discretion to establish the tariff rates that our distribution companies charge our consumers. Our tariffs are determined under concession agreements with the Brazilian government, and in accordance with ANEEL's regulations and decisions.

Our concession agreements and Brazilian law establish a mechanism that allows for three types of tariff adjustments: (i) annual adjustment (RTA), (ii) periodic revision (RTP), and (iii) extraordinary revision (RTE). We are entitled to apply each year for the annual adjustment, which is designed to offset some effects of inflation on tariffs and pass through to consumers certain changes in our cost structure that are beyond our control, such as the cost of the electricity we purchase and certain regulatory charges, including charges for the use of transmission and distribution

facilities. ANEEL generally carries out the RTP every four or five years (according to the terms of each concession agreement). The objective of this periodic revision is to share gains with consumers and incentivize concessionaires to increase efficiency levels. As such, it aims to identify variations in our costs and set a reduction factor based on our operational efficiency that will be applied against the index of our ongoing annual tariff adjustments. Extraordinary revisions of our tariffs may occur at any time, or may be requested by us. Extraordinary revisions may have a negative effect on our results of operations or financial position, or may serve to offset unpredictable costs (such as taxes that significantly change our cost structure). Previously, all revisions in methodologies were addressed in set cycles such as in 2008-2010 and 2010-2014. However, in 2015, ANEEL changed this procedure to allow for the review of the underlying methodologies applicable to the electricity sector from time to time on an item by item basis. Periodic tariff reviews were held for Companhia Paulista de Força e Luz, or CPFL Paulista, and RGE Sul, in April 2018 and for RGE in June 2018, resulting in average adjustments of 16.90% (CPFL Paulista), 22.47% (RGE Sul) and 20.58% (RGE).

We cannot predict whether ANEEL will establish tariffs or methodologies that are favorable to us. See “Item 5. Operating and Financial Review and Prospects—Background—Periodic Revisions—RTP” for more information.

Our Distribution business may be required to reimburse consumers for up to ten years in the event of inaccurate billings.

The regulations applicable to inaccurate billings, in particular those regarding time barring periods, as established by Article 113, II, of ANEEL Normative Resolution No. 414, of September 9, 2010, were suspended by a preliminary injunction granted on December 18, 2018, and given effect by ANEEL on January 4, 2019. The original language of Article 113, II, limited the period during which Distribution companies were required by ANEEL to reimburse consumers in the event of inaccurate billings to 36 months. While the preliminary injunction remains in place, the new time barring period to be applied by ANEEL is ten years. If the preliminary injunction remains in place, we will be required to reimburse customers in the event of inaccurate billings for a ten-year period, which could represent a significant cost and adversely affect our financial results.

We may not be able to comply with the terms of our concession agreements and authorizations, which could result in fines, other penalties and, depending on the gravity of the non-compliance, in our concessions or authorizations being terminated.

ANEEL may impose penalties on us in the event that we fail to comply with any provision of our concession agreements or authorizations. Depending on the gravity of the non-compliance, these penalties could include the following:

- warning notices;
- fines per breach of up to 2.0% of the revenues generated by the relevant concession or authorization in the 12 months prior to the infraction notice related to the breach, or (if the relevant concession or authorization is non-operational) up to 2.0% of the estimated value of the energy that would have been produced for the 12 months prior to the infraction notice related to the breach;
- injunctions related to construction activities;
- restrictions on the operation of existing facilities and equipment;
- requiring the concessionaire’s controlling shareholders to carry out further capital expenditures (not applicable to authorizations);
- temporary suspension from participating in new tenders, which may also be extended to controlling shareholders of the entity subject to the penalty;
- intervention by ANEEL in the management of the concessionaire; and
- termination of the concession or authorization.

In addition, the Brazilian government may terminate any of our concession agreements or authorizations by means of expropriation if it deems this to be in the public interest.

We are currently in compliance with all of the material terms of our concession agreements and authorizations and each of our power plants is supported by legal permissions granted by the competent authority. However, we cannot assure you that we will not be penalized by ANEEL for breaching our concession agreements or authorizations or that our concessions or authorizations will not be terminated in the future. The compensation to which we are entitled upon expiration or early termination of our concessions or authorizations may not be sufficient for us to realize the full value of certain assets. In addition, if any of our concession agreements or authorizations is terminated for reasons

Our Distribution business may be required to reimburse consumers for up to ten years in the event of inaccurate bill

attributable to us, the effective amount of compensation by the granting authorities could be materially reduced through the imposition of fines or other penalties. Accordingly, the imposition of fines or penalties on us or the termination of any of our concessions or authorizations could have a material adverse effect on our financial condition, results of operations and our capacity to fulfill our contractual obligations.

The distribution concessions held by our previous distribution subsidiaries CPFL Santa Cruz, CPFL Jaguari, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista (now merged into CPFL Santa Cruz) were originally granted in 1999 for a 16-year term and have recently been extended to July 2045. The extensions were granted under the new laws and regulations regarding distribution concessions, in particular Decree No. 7,805/12, Law No. 12,783/13 and Decree No. 8,461/15, so the concessions are now subject to the new targets and standards established by the Brazilian authorities. Such new targets and standards are included in the amendments to the concession agreements. There is as yet no precedent regarding how the authorities will act under these new laws and regulations, which include certain variables that are beyond our control and which may therefore impair our ability to fully achieve the relevant goals. If we do not achieve the applicable goals, our distribution concessions and, therefore, our revenues and our capacity to fulfill our contractual obligations could be adversely affected. See “Item 4—Information on the Company—Our Concessions and Authorizations—Concessions” for more information.

In our Distribution business, we are required to forecast demand for electricity in the market. If actual demand is different from our forecast, we could be forced to purchase or sell electricity in the spot market at prices that could lead to additional costs for us, which we may not be able to fully pass on to customers.

Under the New Regulatory Framework, an electricity distributor must contract in advance, through public bids, for 100% of the required electricity that it has forecast for its Captive Consumers in its distribution concession areas, and is authorized to pass through the cost of up to 105% of this electricity purchase to consumers. Over- or under-forecasting demand can have adverse consequences. If we under-forecast the electricity demand and purchase in advance less electricity than we need, in a manner for which we are considered liable under the New Regulatory Framework and applicable regulation, we may be required to purchase the additional electricity in the spot market at volatile prices that can be substantially higher than under our long-term purchase agreements. We may be prevented from passing through this additional cost in full to consumers; and we would also be subject to penalties under applicable regulation. On the other hand, if we over-forecast demand and purchase in advance more electricity than we need (for example, if a significant portion of our Potential Free Consumers migrate and purchase electricity in the Free Market), we may be required to sell the surplus energy at prices substantially lower than under our concessions. In either circumstance, if there are significant differences between our forecast electricity needs and actual demand, our results of operations may be adversely affected. Since August 2017, Decree No. 9,143/17 has allowed distribution companies to negotiate the energy surplus with Free Consumers and other agents of the Free Market (generators, traders and self-producers). See “Item 4. Information on the Company—The Brazilian Power Industry—The New Regulatory Framework—Restricted Activities of Distributors” and “Item 4. Information on the Company—Distribution—Purchases of Electricity” for more information.

ANEEL is revising the regulation on net metering and distribution tariffs and such revisions could adversely affect our distribution business.

Established by ANEEL Normative Resolution No. 482, of April 17, 2012, net metering regulations enable Captive Consumers to generate power and to inject any surplus of energy into the distribution system, in exchange for energy credits that can be used to offset future consumption in the following 60 months. This resolution was amended in 2015 to enable shared generation according to which a group of consumers can generate power in a remote location within the same distribution concession area and divide the energy credits between its constituents. ANEEL is currently conducting public hearings to review ANEEL Normative Resolution No. 482, of April 17, 2012, in particular with regard to the distribution fees to be paid to distribution concessionaires over the netted amounts of energy. The revised regulation should come into effect in 2020. If ANEEL revises the regulation in a way that is unfavorable to us, our results of operations could be adversely affected.

Furthermore, Captive Consumers classified as Group B are currently subject to pay monomial distribution tariffs that include energy consumption and as well as the use of the distribution system. ANEEL is conducting public hearings to

In our Distribution business, we are required to forecast demand for electricity in the market. If actual demand is different from our forecast, we could be forced to purchase or sell electricity in the spot market at prices that could lead to additional costs for us, which we may not be able to fully pass on to customers.

assess the regulatory impacts of a possible change in the tariffs structure of these consumers to a binomial structure, which would segregate the tariffs paid for the energy consumption and the tariffs paid for the use of the distribution system. If this binomial structure is implemented in a way that is unfavorable to us, our results of operations could be adversely affected.

Commercialization activity is subject to potential losses due to short-term variations in energy prices on the spot market. In addition, we may not be able to buy electricity in the amount we need to meet our sales agreements, which may expose us to the spot market at prices substantially higher than under our long-term agreements.

Sellers in the Free Market are subject to potential differences in the settlement between the energy delivered and the energy sold, and buyers in the Free Market are subject to potential differences in the settlement between the energy consumed and the energy acquired. The differences are settled by the CCEE at the spot price, or the PLD. The PLD is based on the energy traded in the spot market. It is calculated for each submarket and load level on a weekly basis and is based on the marginal cost of operation. The maximum and the minimum value of the PLD are set every year by ANEEL. Short-term variations in energy prices on the spot market may lead to potential losses in our commercialization activity. In addition, we may not be able to buy electricity in the amount we need to meet our sales agreements, which may expose us to the spot market at prices substantially higher than under our long-term agreements. For more information about a series of recent developments in regulations with respect to registration with the CCEE of expected consumption volume by participants in the Free Market, see “Item 4. Information on the Company—The New Regulatory Framework—Recent Developments in the Free Market.”

Our operating results depend on prevailing hydrological conditions. Poor hydrological conditions may affect our results of operations.

We are dependent on the prevailing hydrological conditions in Brazil. In 2018, according to data from the ONS, 71.8% (69.9% in 2017) of Brazil’s electricity supply came from Hydroelectric Power Plants.

Brazil is subject to unpredictable hydrological conditions, with non-cyclical deviations from average rainfall. When hydrological conditions are poor, the ONS may dispatch Thermoelectric Power Plants, including those that we operate, to top up hydroelectric generation and maintain security levels in reservoirs and the electricity supply level in cases when the Hydroelectric Power Plants in Brazil, including those we operate, are unable to generate sufficient energy to honor their Assured Energy requirement in the MRE. This process to offset the deficit of hydroelectric energy, which was created in 2000 and is referred to as the Generation Scaling Factor, or GSF, therefore exposes operators of Hydroelectric Power Plants to spot price risk. The GSF was activated in 2014, 2015 and 2016, requiring us to purchase energy, therefore leading to adverse results in our Generation segment. Under Federal Law 13,203 of December 8, 2015, we have effectively capped our exposure to this risk for the life of our existing power purchase agreements, or PPAs, in our Generation segment, and have covered the cash outlay from January 2015 to July 2020 through the GSF payment we made in 2015 regarding the electricity required to serve our consumers in the Regulated Market. We remain exposed to this spot price risk, however, with respect to the cost of electricity required to serve our consumers in the Free Market. See “Item 4. Information on the Company—The Brazilian Power Industry—Generation Scaling Factor” for more information.

In the Distribution segment, thermoelectric generation can lead to additional energy purchase costs when the ONS dispatches Thermoelectric Power Plants by merit order, and extraordinary charges, such as a component of the ESS related to energy security, the ESS-SE, when these power plants are dispatched out of the merit order. These additional costs are ultimately passed through by the Distributor to consumers through tariff increases in future annual adjustments or periodic reviews, as permitted by regulation. However, there may be a cash flow mismatch in the intervening period, since these costs must be covered immediately, while the tariffs are only readjusted later. See “Item 4. Information on the Company—The Brazilian Power Industry—Regulatory Charges—ESS” for more information.

In January 2015, the electricity sector began to implement a mechanism of monthly “tariff flags” under which consumer invoices may be subject to tariff additions on a monthly basis when energy supply costs reach certain levels, enabling consumers to adapt their usage to current energy costs. Revenues collected under the tariff flag system are repaid to distribution companies on the basis of their relative energy cost for the period. Due to the poor hydrological

conditions that were observed from 2013 through 2015, red tariff flags were applied throughout 2015 since introduction of the system in January 2015. In 2016, due to an improvement in hydrological conditions, green tariff flags were applied in most months of the year, but 2017 consisted principally of yellow and red tariff flags. In November 2017, ANEEL held a public hearing in order to review the tariff flags methodology. In accordance with the new methodology, red tariff flags were applied in November and December 2017. In 2018, green tariff flags were applied from January to April and again in December, yellow tariff flags were applied in May and November, and red tariff flags were applied from June to October. In April 2018, the methodology to calculate the additional rates due to the tariff flags was revised in order to consider the lack of hydropower generation (GSF factor). From June to October 2018, the tariff flag reached its highest level, collecting an additional R\$50 for each MWh consumed due to poor hydrological conditions and high spot market prices. Although this mechanism mitigates the cash flow mismatch in part, it may be insufficient to cover the thermoelectric energy supply costs and the exposure in the spot market due to poor hydrological conditions (GSF factor), and Distributors still bear the risk of cash flow mismatches in the short term. See “Item 4. Information on the Company—Basis for Calculation of Distribution Tariffs” for more information.

The impact of an electricity shortage and related electricity rationing, as in 2001 and 2002, may have a material adverse effect on our business, results of operations and capacity to fulfill our contractual obligations.

Periods of severe or sustained below-average rainfall resulting in an electricity shortage may adversely affect our financial condition and results of operations. For example, during the low rainfall period of 2000 and 2001, the Brazilian government instituted the Rationing Program, a program to reduce electricity consumption that was in effect from June 1, 2001 to February 28, 2002. The Rationing Program established limits for energy consumption for industrial, commercial and residential consumers, with reductions in consumption ranging from 15% to 25%. If Brazil experiences another electricity shortage (a condition which might happen and we are not able to control or anticipate), the Brazilian government may implement similar or other policies in the future to address the shortage. For example, electricity conservation programs, including mandatory reductions in electricity consumption, could be implemented if poor hydrological conditions cannot be offset in practice by other energy sources, such as Thermoelectric Power Plants, thereby resulting in a low supply of electricity to the Brazilian market.

In the event of a shortage of electricity, with a lower supply of electricity in the Brazilian market, our operations, financial results and our capacity to fulfill our contractual obligations may be adversely affected.

We are uncertain as to the review of the Assured Energy of our Generation Power Plants.

Decree No. 2,655 of July 2, 1998 established that the Assured Energy of generation power plants would be revised every five years. As part of these revisions, the MME can revise a company's Assured Energy, limited to a maximum change of 5% per revision or 10% over the entire period of the concession agreement. According to Ordinance No. 515/2015 issued by the MME, the first revision of Assured Energy under this process was originally expected to be implemented for Hydroelectric Power Plants (other than SHPPs) in January 2017. Since the application of the methodology of this new revision to each power plant is not yet available; however, the MME issued Ordinance No. 714/2016, pursuant to which the current Assured Energy for each Hydroelectric Power Plant would remain in effect until December 2017. The first revision of Assured Energy was implemented in January 2018 under MME Ordinance No. 178/2017 and led to a reduction in the Assured Energy of our Hydroelectric Power Plants by an average of 2.4%. SHPPs, unlike other Hydroelectric Power Plants, have been subject to annual revisions of their Assured Energy since 2010 in accordance with MME Ordinance No. 463/2009. These annual revisions have not resulted in reductions in the Assured Energy levels of CPFL Geração's SHPPs, but have resulted in reductions for CPFL Renováveis' SHPPs (although in 2017, CPFL Renováveis, together with certain other renewable energy producers, obtained a court order reinstating the initial Assured Energy levels of their SHPPs pending final resolution of their appeal against the revision process). Beginning in 2017, Decree No. 564/2014 extended such revision to biomass plants, which led to an increase in the Assured Energy of CPFL Renováveis's biomass plants by an average of 8% in 2018.

We cannot be certain how future revisions will affect the Assured Energy of each of our individual power plants, whether the renewable energy producers will succeed in their appeal against the revision process, or whether the overall effect of revisions will increase or decrease our Assured Energy. When the Assured Energy of a power plant is decreased, our ability to supply electricity under that plant's PPAs is adversely affected, which can lead to a decrease in our revenues and increase our costs if our generation subsidiaries are required to purchase power elsewhere. We expect revisions of Assured Energy under Decree n° 2,655/98 to continue to take place every five years for our power plants other than SHPPs. See "Item 4—Principal Regulatory Authorities—Ministry of Mines and Energy – MME" for more information.

Construction, expansion and operation of our electricity generation, transmission and distribution facilities and equipment involve significant risks that could lead to lost revenues or increased expenses.

The construction, expansion and operation of facilities and equipment for the generation, transmission and distribution of electricity involve many risks, including:

- the inability to obtain required governmental permits and approvals;
- the unavailability of equipment;
- supply interruptions;
- work stoppages;
- labor unrest, including strikes;
- social unrest;
- weather and hydrological interferences;
- unforeseen engineering, regulatory and/or environmental problems,
- increases in electricity losses, including technical and commercial losses;
- construction and operational delays, or unanticipated cost overruns;
- the inability to win electricity auctions held by ANEEL; and
- unavailability of adequate funding.

If we experience these or other problems, we may not be able to generate or distribute electricity in amounts consistent with our projections, which may have an adverse effect on our financial condition, results of operations and our capacity to fulfill our contractual obligations.

We are subject to environmental and health regulations that may become more stringent in the future and may result in increased liabilities and increased capital expenditures.

Our activities are subject to comprehensive federal, state and municipal legislation, the need to obtain and maintain licenses, as well as regulation and supervision by Brazilian governmental agencies that are responsible for the implementation of environmental and health laws and policies. These agencies could take enforcement action against us for failure to comply with their regulations, or to obtain or maintain licenses. These actions could include, among other things, the imposition of administrative and criminal sanctions, including fines and revocation of licenses. The sanctions depend on the seriousness of the infraction or on the extent of damage caused, and any mitigating or aggravating circumstances applicable to the violator. It is possible that enhanced environmental and health regulations will force us to allocate capital expenditures to compliance, and consequently, increase our level of investment or divert funds from existing planned investments, either of which could have a material adverse effect on our financial condition and results of operations.

If we are unable to complete our proposed capital expenditure program in a timely manner, the operation and development of our business may be adversely affected.

We plan to invest R\$1,028 million in our Generation activities (R\$968 million in renewable sources and R\$60 million in conventional sources), R\$10,094 million in our Distribution activities, R\$175 million in our commercialization and services activities and R\$642 million in our Transmission activities during the period from 2019 through 2023. Our ability to carry out this capital expenditure program depends on a variety of factors, including our ability to charge adequate tariffs for our services, our access to domestic and international capital markets and a variety of operating, regulatory and other contingencies. We cannot be certain that we will have the financial resources to complete our proposed capital expenditure program, and failure to do so could have a material adverse effect on the operation and development of our business.

We plan to make capital expenditures aggregating R\$2,174 million in 2019 and R\$2,565 million in 2020. Of total budgeted capital expenditures over this period, R\$4,012 million are expected to be invested in our Distribution segment, R\$203 million in our Renewable Generation segment and R\$25 million in our Conventional Generation segment. In addition, over this period, we plan to invest R\$405 million in our Transmission segment and R\$94 million in our commercialization and services activities. We have already contractually committed to part of these expenditures, particularly in generation projects. See “Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources—Funding Requirements and Contractual Commitments” for more information. Planned capital expenditures for development of our generation capacity, and the related financing arrangements, are discussed in more detail under “Item 4. Information on the Company—Generation of Electricity.” Our ability to complete the proposed capital expenditure program described above depends on a series of factors, including our ability to charge adequate tariffs for our services, our access to Brazilian and foreign securities markets and several operational and regulatory contingencies, among others. There is no certainty regarding whether we will have the financial resources available to conclude our proposed capital expenditure program. Any inability to complete this program may have a material adverse effect on us, our operations, the development of our business and our capacity to fulfill our contractual obligations.

We are strictly liable for any losses and damages resulting from inadequate provision of electricity services, and our contracted insurance policies may not fully cover such losses and damages.

Under Brazilian law, we are strictly liable for direct and indirect losses and damages resulting from the inadequate provision of electricity distribution services. In addition, our distribution facilities may, together with our transmission and generation utilities, be held liable for losses and damages caused to others as a result of interruptions or disturbances arising from the generation, transmission or distribution systems, whenever these interruptions or disturbances are not attributed to an identifiable member of the ONS. We cannot assure you that our contracted insurance policies will fully cover damages resulting from inadequate rendering of electricity services, which may have an adverse effect on us and our capacity to fulfill our contractual obligations.

We may not be able to create the expected benefits and return on investments from our renewable energy generation businesses.

Through our subsidiary CPFL Renováveis we have made substantial capital investments (amounting to R\$1,825 million for the last three fiscal years) in generation businesses other than hydroelectric power, principally wind and biomass generation. These renewable generation businesses are dependent on certain factors that are not within our control and may significantly affect these businesses. In the biomass business, we may suffer from market shortages of sugar cane, a necessary input for biomass generation. In addition, we depend to a certain extent on the performance of our partners in the operation of biomass plants. The operation of wind farms involves significant uncertainties and risks, including financial risk associated with the difference between the energy we generate and the energy contracted through the public energy auctions. These financial risks are principally: (i) lower wind intensity and duration than that contemplated in the study phase of the project; (ii) any delay in commencement of a wind farm’s operations; and (iii) unavailability of wind turbines at levels above the performance benchmarks.

If these generation plants are not able to generate the energy we have contracted to supply, we may be obliged to buy the shortfall in the spot market, which would increase our costs and lead to losses in this segment. See “Item 4. Information on the Company—The Brazilian Power Industry—The New Regulatory Framework” for more information.

Our controlling shareholder’s interests could conflict with yours.

On January 23, 2017, State Grid Brazil Power Participações S.A., or State Grid, consummated the acquisition of common shares representing 54.6% of our voting capital, pursuant to which it has gained control over us. State Grid

We are strictly liable for any losses and damages resulting from inadequate provision of electricity services²⁹ and our

Brazil Power Participações S.A. is an indirect subsidiary of State Grid Corporation of China, a state-owned enterprise of the People's Republic of China. In November 2017, State Grid launched a mandatory tender offer for our shares. Following the closing of this tender offer on December 5, 2017, State Grid jointly with ESC Energia S.A. held 964,521,902 of our common shares, equivalent to 94.75% of our total share capital.

On April 2, 2019, the Company informed the B3 its intention to bring its free float in compliance with *Novo Mercado* rules by carrying out a follow-on offering for its common shares, and on April 18, 2019, B3 approved its request for an extension of the deadline to reach a minimum free float of 15% of its total capital until October 31, 2019. The Company is still considering the terms and conditions of any potential follow-on offering.

Our controlling shareholder may take actions that could be contrary to your interests, and our controlling shareholder will be able to prevent other shareholders, including you, from blocking these actions. In particular, our controlling shareholder controls the outcome of decisions at shareholders' meetings, and it can elect a majority of the members of our Board of Directors.

Our controlling shareholder can direct our actions in areas such as business strategy, financing, distributions, acquisitions and dispositions of assets or businesses. Its decisions on these matters may be contrary to the expectations or preferences of our non-controlling shareholders, including holders of our ADSs. See "Item 4. Information on the Company—Overview" for more information regarding State Grid's acquisition and its announced intentions regarding shareholdings in our company.

We are exposed to increases in prevailing market interest rates as well as foreign exchange rate risk.

As of December 31, 2018, 72.4% of our total indebtedness was denominated in *reais* and indexed to Brazilian money-market rates or inflation rates, or bore interest at floating rates. The remaining 27.6% of our total indebtedness as of December 31, 2018 was denominated in foreign currency, substantially U.S. dollars, compared to 24.1% as of December 31, 2017, although this foreign currency denominated debt is substantially subject to currency swaps that convert these obligations into *reais*. In addition, the costs of electricity purchased from the Itaipu Power Plant, or Itaipu, a Hydroelectric Power Plant that is one of our major suppliers, are indexed to the U.S. dollar exchange rate. Our tariffs are adjusted annually in order to contemplate the losses or gains from these purchases from Itaipu. Accordingly, when the Brazilian *real* appreciates against the U.S. dollar, our financing expenses decrease.

Our indebtedness and debt service obligations could adversely affect our ability to operate our business and make payments on our debt.

As of December 31, 2018, we had total debt of R\$20,377 million. Our indebtedness increases the possibility that we may be unable to generate cash sufficient to pay when due the principal, interest or other amounts due in respect of our indebtedness. In addition, we may incur additional debt from time to time to finance acquisitions, investments, joint ventures or for other purposes, subject to the restrictions applicable under our existing indebtedness, such as when we acquired RGE Sul in October 2016. If we incur additional debt, the risks associated with our leverage would increase.

We may acquire other companies in the electricity business, as we have in the past, and these acquisitions could increase our leverage or adversely affect our consolidated performance.

We regularly analyze opportunities to acquire other companies engaged in activities along the entire electricity generation, transmission and distribution chain, such as when we acquired RGE Sul in October 2016, or make non-controlling investments in companies in the sector. If we do make investments in other electricity companies, this could increase our leverage or reduce our profitability. Furthermore, we may not be able to integrate an acquired company's activities and achieve the economies of scale and expected efficiency gains that often drive such acquisitions. Any such failure could harm our financial condition and results of operations.

Our transmission business may be obligated to perform certain work for a price established by ANEEL, which may be based on unrealistic costs and at a lower weighted average cost of capital than the one we accepted in the auctions in which we have participated.

The applicable laws and regulations, as well as the concession agreements of our transmission business, set forth that we are obligated to perform maintenance and enhancements on the existing transmission facilities when mandated by ANEEL. The orders to perform such maintenance and enhancements are included in the authorizations issued by ANEEL. The price for such projects is unilaterally established by ANEEL based on prices included in a theoretical cost database and on a regulatory weighted average cost of capital, which may be lower than the one we accepted in

We are exposed to increases in prevailing market interest rates as well as foreign exchange rate risk. 31

the auctions in which we have participated. We may be obligated to perform work for which returns on investment may differ from our expectations.

The level of default by our consumers could adversely affect our business, operational results, and/or financial situation.

The level of default by our consumers may be affected by economic factors such as income levels, unemployment, interest rates, inflation and the price of energy. The current macroeconomic situation in Brazil, combined with the increase in energy prices in recent years, could lead to an increase in the risk of default by our consumers. Although we have implemented a number of measures to improve payment collection, we cannot assure you that these measures will be sufficient or effective in maintaining our consumer default at current levels. If the level of default increases, our business, operational results, financial situation and capacity to fulfill our contractual obligations could be adversely affected.

Our business is subject to cyberattacks and security and privacy breaches.

Our business involves the collection, storage, processing and transmission of customers', suppliers and employees' personal or sensitive data. We also use key information technology systems for controlling energy and commercial, administrative and financial operations. An increasing number of organizations, including large businesses, financial institutions and government institutions, have disclosed breaches of their information technology and information security systems, some of which have involved sophisticated and highly targeted attacks, including on portions of their websites or infrastructure.

The techniques used to obtain unauthorized, improper or illegal access to our systems, our data or our customers' data, to disable or degrade service, or to sabotage systems are constantly evolving, may be difficult to detect quickly, and often are not recognized until launched against a target. Unauthorized parties may attempt to gain access to our systems or facilities through various means, including, among others, hacking into our systems or those of our customers, partners or vendors, or attempting to fraudulently induce our employees, customers, partners, vendors or other users of our systems into disclosing user names, passwords, payment card information or other sensitive information, which may in turn be used to access our information technology systems. Certain efforts may be supported by significant financial and technological resources, making them even more sophisticated and difficult to detect.

Although we have developed systems and processes that are designed to protect our data, the data of our customers, employees and suppliers, and to prevent data loss and other security breaches, and expect to continue to expend significant additional resources to bolster these protections, these security measures cannot provide absolute security. Our information technology and infrastructure may be vulnerable to cyberattacks or security breaches, and third parties may be able to access our customers', suppliers' and employees' personal or proprietary information that are stored on or accessible through those systems. Our security measures may also be breached due to human error, malfeasance, system errors or vulnerabilities, or other irregularities. Any actual or perceived breach of our security could interrupt our operations, result in our systems or services being unavailable, result in improper disclosure of data, materially harm our reputation and brand, result in significant legal and financial exposure, lead to loss of customer confidence in, or decreased use of, our products and services, and adversely affect our business and results of operations. In addition, any breaches of network or data security at our customers or suppliers, including data center, could have similar negative effects. Actual or perceived vulnerabilities or data breaches may lead to claims against us.

We also expect to spend significant additional resources to protect against security or privacy breaches, and may be required to address problems caused by breaches. Additionally, while we maintain insurance policies, we do not maintain insurance policies specifically for cyberattacks and our current insurance policies may not be adequate to

The level of default by our consumers could adversely affect our business, operational results, and/or financial situation.

reimburse us for losses caused by security breaches, and we may not be able to collect fully, if at all, under these insurance policies. We cannot guarantee that the protections we have in place to protect our operating technology and information technology systems are sufficient to protect against cyberattacks and security and privacy breaches.

Data breaches in our database, which contains the personal data of our clients, suppliers and employees, as well as the Brazilian General Data Protection Act, or GDPR, which will come into force in August 2020, and other developments in the personal data protection and privacy legal framework could have an adverse effect on our business, financial condition or results of operations.

We maintain a database of information about our customers, which mainly includes data collected when clients sign up for our services and through our mobile applications. If we experience a breach in our security procedures, the integrity of our database may be affected. Doubts or misgivings about the security and protection of our customers' data stored in our systems or otherwise processed by us can affect our reputation and, therefore, negatively impact our results. Unauthorized access of the personal data of our clients or any public perception that we unduly disclose the personal information of our clients may subject us to legal or administrative proceedings, resulting in damages, fines and harm to our reputation, especially after the GDPR (as defined and described below) comes into force.

Currently, the processing of personal data in Brazil is regulated by a series of rules, such as the Federal Constitution, the Consumer Protection Code and the Internet Civil Registry. Failure to comply with certain provisions of applicable law, especially as regards (i) providing clear information on the data processing operations performed by us, (ii) respect for the original purpose of the data collection; (iii) legal deadlines for the storage and exclusion of user personal data, and (iii) the adoption of legally required security standards for the preservation and inviolability of the personal data processed, can give rise to penalties, such as fines and even temporary suspension or prohibition of our personal data processing activities.

Data protection and privacy laws in Brazil are developing following global trends. There can be no guarantee that we will have sufficient financial resources to comply with any new regulations or successfully compete in relation to data protection practices, in the context of a shifting regulatory environment.

In 2018, Law No. 13,709/2018, the GDPR, was signed, as amended by Provisional Measure No. 869/2019, or MP 869/2019, which will come into force in August 2020. The GDPR has a wide range of application and applies to natural persons and private and public entities, regardless of the country where they are located or where the data is hosted, as long as (i) the data processing takes place in Brazil; (ii) the data processing is aimed at offering services or goods or to process data of individuals located in Brazil; or (iii) the data subjects are located in Brazil at the time the personal data is collected. The GDPR will apply regardless of industry or business dealing with personal data and is not limited to data processing activities through digital media and/or in the internet.

The GDPR brings deep changes in the regulation of personal data processing in Brazil, with a set of rules to be observed in activities such as collection, processing, storage, use, transfer, sharing, and erasure of information related to identified or identifiable natural persons in Brazil, including that of our clients, suppliers and employees. The GDPR establishes, among others, principles, requirements and obligations applicable to data controllers or processors, a set of rights of personal data subjects, the legal basis applicable to the protection of personal data, requirements for obtaining consent of data subjects, obligations and requirements relating to security incidents, and obligations related to cross-borders data transfers, obligations to appoint a data protection officer, corporate governance practices, civil liability regime and penalties for non-compliance with its provisions. The National Data Protection Authority, which will have authority and responsibility similar to that of the European data protection authorities, will be responsible for (i) investigating, including the authority to issue rules and proceedings, decide on the GDPR interpretation and request information to controllers and processors; (ii) enforcement, in case of non-compliance with the law, through administrative proceedings; and (iii) education, with the responsibility to disseminate information and knowledge about the GDPR and security measures, promoting service and product standards that support data control, developing studies about national and international practices for personal data protection and privacy, among others.

We may have difficulty adapting to the new legislation, given the quantity and complexity of the new obligations. In the event of non-compliance with the GDPR, we may be subject to penalties which include the publication of the infraction, elimination of personal data to which the violation relates, and a fine, per infraction, of up to 2% of our group's turnover in Brazil during the last fiscal year, excluding current taxes (subject to a limit of R\$50,000,000).

The GDPR and similar laws and regulations that may be passed in the future may be interpreted and applied differently over time and from jurisdiction to jurisdiction, and it is possible they will be interpreted and applied in ways that will materially and adversely affect our business. Any failure, real or perceived, by us to comply with the law in force relating to personal data protection or with any regulatory requirements or orders or other local, state, federal, or international personal data protection-related laws and regulations could materially and adversely affect our business.

Risks Relating to Brazil

The Brazilian government has exercised, and continues to exercise, significant influence over the Brazilian economy. This involvement, as well as Brazilian political and economic conditions, could adversely affect our business and the trading price of our ADSs and our common shares.

The Brazilian government frequently intervenes in the Brazilian economy and occasionally makes significant changes in policy and regulations. The Brazilian government's actions to control inflation and other policies and regulations have often involved, among other measures, increases in interest rates, changes in tax policies, price controls, currency devaluations, capital controls and limits on imports. Our business, financial condition and results of operations may be adversely affected by changes in policy or regulations at the federal, state or municipal levels involving or affecting factors such as:

- interest rates;
- monetary policy;
- currency fluctuations;
- inflation;
- liquidity of domestic capital and lending markets;
- tax policies;
- changes in labor laws;
- regulatory environment of our sector;
- exchange rates and exchange controls and restrictions on remittances abroad, such as those that were briefly imposed in 1989 and early 1990; and
- other political, social and economic developments in or affecting Brazil.

Uncertainty over whether the Brazilian government will change policies or regulations affecting these or other factors may contribute to political and economic uncertainty in Brazil and to heightened volatility in Brazilian securities markets and securities issued abroad by Brazilian issuers. Standard & Poor's downgraded Brazil below investment grade on September 9, 2015 and further downgraded Brazil from BB to BB- on January 11, 2018, with stable outlook, and reconfirmed its position on August 9, 2018; Fitch Ratings lowered its rating for Brazil from BBB- to BB+ on December 16, 2015, to BB on May 5, 2016 and later to BB- on February 23, 2018, with stable outlook, and reconfirmed its position on August 1, 2018; and Moody's Investors Service downgraded Brazil to Ba2 on February 24, 2016, with stable outlook, and reconfirmed its position on April 9, 2018. These downgrades reflected poor economic conditions, continued adverse fiscal developments and increased political uncertainty in Brazil.

We cannot assure you that the Brazilian government will continue with its current economic policies, or that these and other developments in Brazil's economy and government policies will not, directly or indirectly, adversely affect our business and results of operations.

Political conditions may have an adverse impact on the Brazilian economy and on our business.

The recent economic instability in Brazil has contributed to a decline in market confidence in the Brazilian economy, as well as to a deteriorating political environment. Despite the slow economic recovery and the still high fiscal vulnerability, several Brazilian macroeconomic fundamentals improved during 2017–18. The main highlight was the deceleration of inflation and the achievement of historically low interest rates.

The economic outlook for 2019 continues to face significant uncertainties. The Brazilian economy is expected to continue recovering at a moderate pace. The median market forecast currently predicts that the GDP growth rate will accelerate from 1.1% in 2018 to around 2.5% in 2019 (according to Focus Report on January 4, 2019).

In addition, the recent political instability in Brazil has contributed to a decline in market confidence in the Brazilian economy. Various ongoing investigations into allegations of money laundering and corruption being conducted by the Office of the Brazilian Federal Prosecutor, including the largest such investigation, known as “*Operação Lava Jato*,” have negatively impacted the Brazilian economy and political environment.

Under “*Operação Lava Jato*” members of the Brazilian federal government and of the legislative branch, as well as senior officers of large state-owned and private companies, have faced allegations and, in certain cases, convictions, or, also, entering into plea bargains, related to crimes of political corruption, involving alleged bribes by means of kickbacks on contracts granted by the government to several infrastructure, oil and gas and construction companies. The profits of these kickbacks allegedly financed the political campaigns of political parties of the government that were unaccounted for or not publicly disclosed, in addition to alleged personal enrichment of the recipients of the bribes and the favoring of companies in contracts with the Brazilian government. Furthermore, certain of these companies have or are also facing investigations, and, in certain cases, being convicted by the competent authorities, such as the CVM, the SEC and the United States Department of Justice. Certain of these companies have chosen to enter into leniency agreements with the competent authorities, when possible. The potential outcome of these investigations, convictions, plea bargaining and leniency agreements is still uncertain, but they have already had an adverse impact on the image and reputation of the implicated companies, political parties and on the general market perception of the Brazilian economy and political environment. We cannot predict whether such investigations will lead to further political and economic instability or whether new allegations against government officials, officers and/or companies will arise in the future. In addition, we cannot predict the outcome of any such investigations or allegations nor their effect on the Brazilian economy.

In August 2016, the Brazilian Senate approved the removal of Dilma Rousseff, Brazil’s then-President, from office, following a legal and administrative impeachment process for infringing budgetary laws. Michel Temer, the former Vice-President, who assumed the presidency of Brazil following Rousseff’s impeachment, is also under investigation for corruption allegations and was arrested on March 21, 2019. In addition, another former president, Luiz Inacio Lula da Silva, began serving a 12-year prison sentence for corruption and money laundering in April 2018. On October 28, 2018, Jair Bolsonaro, a former member of the military and a congressman for nearly 30 years, was elected the President of Brazil and took office on January 1, 2019.

We cannot predict which policies the current President of Brazil may adopt or change during his mandate or the effect that any such policies might have on our business and on the Brazilian economy. During his presidential campaign in 2018 and at the start of his four-year term, Bolsonaro reportedly favored the privatization of state-owned companies, economic liberalization, new pension legislation and tax reforms. However, there is no guarantee that Bolsonaro will be successful in executing his campaign promises or passing certain favored reforms fully or at all, particularly when confronting a fractured congress. Moreover, Bolsonaro was generally a polarizing figure during his campaign for presidency, particularly in relation to certain social views, and we cannot predict the ways in which a divided electorate may continue to impact his presidency and ability to implement policies and reforms, all of which could have a negative impact on us and the price of our ADSs and common shares.

The Brazilian federal government is expected to propose the general terms of a fiscal reform to stimulate the Brazilian economy and reduce the forecasted budget deficit for 2019 and subsequent years, but it is uncertain whether the federal government will be able to gather the required support in the Brazilian congress to pass any proposed reforms. In February 2019, the Brazilian federal government presented to the Brazilian congress a bill proposing a large and

Political conditions may have an adverse impact on the Brazilian economy and on our business.

comprehensive change of Brazil's public social security system. If the Brazilian federal government fails to reduce public expenses and the expected reforms are not approved, Brazil will continue to run a budget deficit for 2019 and the subsequent years. We cannot predict the effects of this budget deficit on the Brazilian economy, nor which policies the Brazilian federal government may adopt or change or the effect that any such policies might have. Any such new policies or changes to current policies may have a material adverse effect on us or the price of our ADSs and our common shares. Furthermore, uncertainty over whether the current Brazilian government will implement changes in policy or regulation in the future may contribute to economic uncertainty in Brazil and to heightened volatility for securities issued abroad by Brazilian companies.

Inflation and interest rate policies may impact the Brazilian economy and could harm our business.

Brazil has in the past experienced extremely high rates of inflation and has therefore followed monetary policies that have resulted in one of the highest real interest rates in the world. Between 2009 and March 2019, the base interest rate in Brazil, or SELIC, varied between 6.50% p.a. and 14.25% p.a.

According to the IPCA index, the inflation rate was 3.8%, 2.9% and 6.3% in 2018, 2017 and 2016, respectively. On February, 2019, the accumulated inflation over the immediately preceding 12-month period was 3.89%. Brazil may experience high levels of inflation in the future and inflationary pressures may lead to the Brazilian government intervening in the economy and introducing policies that could adversely affect us, our business and the price of our ADSs. In the past, the Brazilian government's interventions included the maintenance of a restrictive monetary policy with high interest rates that restricted credit availability and reduced economic growth, causing volatility in interest rates. The SELIC rate oscillated from 14.25% as of December 31, 2015 to 6.50% as of December 31, 2018, as established by the CMN. More lenient government and Central Bank policies and interest rate decreases have triggered and may continue to trigger increases in inflation, and, consequently, growth volatility and the need for sudden and significant interest rate increases, which could negatively affect us and increase our indebtedness.

In the event that Brazil experiences high inflation in the future, we may not be able to adjust the prices we charge our clients to offset the potential impacts of inflation on our expenses, including salaries. This would lead to decreased net income, adversely affecting us. Inflationary pressures may also adversely affect our ability to access foreign financial markets.

Exchange rate instability may adversely affect our financial condition and results of operations and the market price of the ADSs and our common shares.

The Brazilian currency has experienced frequent and substantial variations in relation to the U.S. dollar and other foreign currencies over the last decade. The exchange rate of the *real* against the U.S. dollar was R\$3.259 on December 31, 2016; R\$3.308 on December 31, 2017; and R\$3.875 on December 31, 2018. On April 15, 2019, the exchange rate was R\$3.873 per US\$1.00. The *real* may continue to fluctuate significantly against the U.S. dollar in the future.

Depreciation of the *real* increases the cost of servicing our foreign currency denominated debt and the cost of purchasing electricity from the Itaipu power plant, a Hydroelectric Power Plant that is one of our major suppliers and that adjusts electricity prices based in part on its U.S. dollar costs. Depreciation of the *real* against the U.S. dollar could create inflationary pressures in Brazil and cause increases in interest rates, which could negatively affect the growth of the Brazilian economy as a whole and harm our financial condition and results of operations, curtail access to foreign financial markets and may prompt government intervention, including recessionary governmental policies. Depreciation of the *real* against the U.S. dollar can also lead to decreased consumer spending, deflationary pressures and reduced growth in the economy as a whole. On the other hand, appreciation of the *real* relative to the U.S. dollar and other foreign currencies could lead to a deterioration of the Brazilian foreign exchange current account, as well as dampen export-driven growth. Depending on the circumstances, either depreciation or appreciation of the *real* could materially and adversely affect the growth of the Brazilian economy and our business, financial condition and results of operations and our capacity to fulfill our contractual obligations.

Depreciation of the *real* also reduces the U.S. dollar value of distributions and dividends on the ADSs and the U.S. dollar equivalent of the market price of our common shares and, as a result, our ADSs.

Exchange rate instability may adversely affect our financial condition and results of operations and the market price

Developments and the perception of risk in other countries, including the United States and emerging market countries, may adversely affect the market price of Brazilian securities, including our ADSs and our common shares.

The market value of securities of Brazilian issuers is affected by economic and market conditions in other countries, including the United States, the European Union and emerging market countries. The global financial crisis that commenced in 2008 led to significant consequences, including stock and credit market volatility, unavailability of credit, higher interest rates, a general economic slowdown, volatile exchange rates and inflationary pressure. Global recovery from this crisis has been slower than expected in recent years, with the largest emerging economies of China, Brazil and India posting weaker than expected results and the European Union is continuing to experience weak GDP growth, although the United States posted GDP growth of 2.9% in 2018. Although economic conditions in other countries may differ significantly from economic conditions in Brazil, investor reactions to developments in those countries may have an adverse effect on the market value of securities of Brazilian issuers. Crises in the United States, the European Union, China or emerging market countries may diminish investor interest in securities of Brazilian issuers, including ours. This could adversely affect the trading price of the ADSs or our common shares, and could also make it more difficult for us to access the capital markets and finance our operations in the future on acceptable terms or at all.

Risks Relating to the ADSs and Our Common Shares

Holders of our ADSs do not have the same voting rights as our shareholders.

Holders of our ADSs do not have the same voting rights as holders of our common shares. Holders of our ADSs are entitled to the contractual rights set forth for their benefit under the deposit agreements. ADS holders exercise voting rights by providing instructions to the depositary, as opposed to voting at shareholders' meetings or by proxy. In practice, the ability of a holder of ADSs to instruct the depositary as to voting will depend on the timing and procedures for providing instructions to the depositary, either directly or through the holder's custodian and clearing system. See "Item 10. Additional Information—Voting Rights of ADS Holders" for more information.

If you surrender your ADSs and withdraw common shares, you risk losing the ability to remit foreign currency abroad and certain Brazilian tax advantages.

As an ADS holder, you benefit from the electronic registration made by the custodian with the SISBACEN for our common shares underlying the ADSs in Brazil, which permits the custodian to remit abroad proceeds related to dividends and other distributions with respect to the common shares. Pursuant to CMN Resolution No. 4,373, in order for an ADS holder to surrender ADSs for the purpose of withdrawing the shares represented thereby and be entitled to trade the underlying shares directly on the B3, the investor is required to appoint a Brazilian financial institution duly authorized by the Central Bank and the CVM to act as its legal representative. If you surrender your ADSs and withdraw common shares, you will need to update your registration with the SISBACEN and enter into simultaneous foreign exchange transactions (without the effective remittance of funds) in order to re-enable the remittance abroad of proceeds related to the disposition of or distributions relating to the common shares. Before entering into these foreign exchange transactions and updating the SISBACEN registration, you will not be able to remit abroad any proceeds relating to the common shares. If you exchange your ADSs for the respective common shares underlying those ADSs, you may be subject to a less favorable tax treatment on gains with respect to these investments. See "Item 10. Additional Information—Allocation of Net Income and Distribution of Dividends—Payment of Dividends" for more information.

For the registration with the SISBACEN referred to above, as well as for entering into simultaneous foreign exchange transactions, you may incur expenses or suffer delays in the application process, which could delay your ability to receive dividends or distributions relating to our common shares or the return of your capital in a timely manner. The

Developments and the perception of risk in other countries, including the United States and emerging market countries,

depository's electronic registration with SISBACEN may also be adversely affected by future legislative changes.

Holders of ADSs may be unable to exercise preemptive rights with respect to our common shares.

We may not be able to offer our common shares to U.S. holders of ADSs pursuant to preemptive rights granted to holders of our common shares in connection with any future issuance of our common shares unless a registration statement under the Securities Act is effective with respect to such common shares and preemptive rights, or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement relating to preemptive rights with respect to our common shares, and we cannot assure you that we will file any such registration statement. If such a registration statement is not filed and an exemption from registration does not exist, Citibank N.A., as depository, will attempt to sell the preemptive rights, and you will be entitled to receive the proceeds of such sale. However, these preemptive rights will expire if the depository does not sell them, and U.S. holders of ADSs will not realize any value from the granting of such preemptive rights.

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The relative volatility and illiquidity of the Brazilian securities markets may substantially limit your ability to sell the common shares underlying the ADSs at the price and time you desire.

Investing in securities that trade in emerging markets, such as Brazil, often involves greater risk than investing in securities of issuers in the United States, and such investments are generally considered to be more speculative in nature. The Brazilian securities market is substantially smaller, less liquid, more concentrated and can be more volatile than major securities markets in the United States. Accordingly, although you are entitled to withdraw the common shares underlying the ADSs from the depository at any time, your ability to sell the common shares underlying the ADSs at a price and time at which you wish to do so may be substantially limited. There is also significantly greater concentration in the Brazilian securities market than in major securities markets in the United States. The ten largest companies in terms of market capitalization represented 60.4% of the aggregate market capitalization of the B3 (previously known as BM&FBOVESPA) as of December 31, 2018. The top ten stocks in terms of trading volume accounted for 40.8%, 32.1% and 42.8% of all shares traded in 2018, 2017, and 2016, respectively.

ITEM 4. Information on the company

Overview

We are a corporation (*sociedade por ações*) incorporated and existing under the laws of Brazil with the legal and commercial name CPFL Energia S.A. Our principal executive offices are located at Rodovia Engenheiro Miguel Noel Nascentes Burnier, km 2,5, Parque São Quirino, CEP 13088-900, Campinas, state of São Paulo, Brazil and our telephone number is +55 19 3756-6211. Our Investor Relations Department is located at the same address and its telephone number is +55 19 3756-8458.

We are a holding company that, through our subsidiaries, distributes, generates, transmits and commercializes electricity in Brazil as well as provides energy-related services. We were incorporated in 1998 as a joint venture among VBC Energia S.A., or VBC, 521 Participações S.A. and Bonaire to combine their interests in companies operating in the Brazilian power sector.

If you surrender your ADSs and withdraw common shares, you risk losing the ability to remit foreign currency abroad.

We are one of the largest electricity distributors in Brazil, based on the 45,589 GWh of electricity we distributed to 9.6 million consumers in 2018. In electricity generation, our Installed Capacity at December 31, 2018 was 3,272 MW. Through our interest in CPFL Renováveis, we are also involved in the construction of one SHPP and four wind farms, as a result of which we expect to increase our Installed Capacity to 3,322 MW over the next five years as this is completed.

We also engage in power commercialization, buying and selling electricity to power producers, Free Consumers and power trading companies. We also provide agency services to Free Consumers before the CCEE and other agents, as well as electricity-related services to our affiliates and unaffiliated parties. In 2018, the total amount of electricity sold by our commercialization subsidiaries was 81.3 GWh and 20,133 GWh to affiliated and unaffiliated parties, respectively.

On September 2, 2016, our former shareholder Camargo Correa entered into an agreement to sell its 23.6% stake in our company to State Grid. Following the announcement, other members of our controlling shareholders' block also decided to sell their stakes to State Grid. As a result, State Grid acquired 54.6% of our voting capital. State Grid Brazil Power Participações S.A. is an indirect subsidiary of State Grid Corporation of China, a state-owned enterprise of the People's Republic of China. The acquisition was approved by CADE, the Brazilian antitrust regulator, in September 2016 and by ANEEL in December 2016. The acquisition was completed and control of our company was transferred to State Grid on January 23, 2017. In November 2017, State Grid launched a mandatory tender offer for our shares. Following the closing of this tender offer on December 5, 2017, State Grid jointly with ESC Energia S.A. held 964,521,902 of our common shares, equivalent to 94.75% of our total share capital.

On April 2, 2019, the Company informed the B3 its intention to bring its free float in compliance with *Novo Mercado* rules by carrying out a follow-on offering for its common shares, and on April 18, 2019, B3 approved its request for an extension of the deadline to reach a minimum free float of 15% of its total capital until October 31, 2019. The Company is still considering the terms and conditions of any potential follow-on offering.

The following significant developments have occurred in our business since the beginning of 2016:

- In May 2016, two generation facilities at SHPP Mata Velha commenced operations, over a year and a half ahead of schedule. Mata Velha, located in Unaí, in the state of Minas Gerais, has Installed Capacity of 24 MW and an average physical guarantee of 13.1 MW. According to the A-5/2013 energy auction, or the A-5/2013 Energy Auction, held in 2013, the plant's energy trading agreement takes effect in January 2018. Since the plant was completed ahead of schedule, a free market sale agreement was signed, valid until December 2017 until the plant's energy trading agreement took effect.
- In May 2016, the Campo dos Ventos and São Benedito wind complexes started to enter into operations. As of December 31, 2016, all nine wind farms in these complexes were operational. The complexes have 231.0 MW (our share is 119 MW) of Installed Capacity and are located in the state of Rio Grande do Norte.
- On June 15, 2016, our subsidiary CPFL Jaguariúna Participações Ltda. agreed to acquire 100% of AES Sul Distribuidora Gaúcha de Energia S.A. (which subsequently changed its name to RGE Sul Distribuidora de Energia S.A.) from AES Guaíba II Empreendimentos Ltda. RGE Sul (now operating under the name RGE) acts as an electric energy distributor in the state of Rio Grande do Sul and has the exclusive right for distribution of energy to the Captive Market of 118 cities in the state. The transaction closed on October 31, 2016, and the financial results of RGE Sul are reflected in our audited annual consolidated financial statements for November and December 2016. The purchase price after adjustment amounted to R\$1,592 million. After accounting for R\$95 million in cash and cash equivalents acquired within RGE Sul, our net cash outflow on acquisition of RGE Sul was R\$1,497 million.
- On June 2, 2017, CPFL Transmissão Morro Agudo S.A., or CPFL Morro Agudo, a subsidiary of CPFL Geração commenced operations. The concession contract has a duration of 30 years.
- In June 2017, the Pedra Cheirosa wind complex commenced operations. Pedra Cheirosa, located in Itarema, in the state of Ceará, has Installed Capacity of 48.3 MW and a physical guarantee of 27.5 MWavg, as amended by Ordinance No. 192/2017. Until December 2017, when the A-5/2013 Energy Auction agreement took effect, the energy generated by Pedra Cheirosa was supplied to the system and sold in the spot market.
- On December 15, 2017, the management of RGE Sul and its parent company CPFL Jaguariúna Participações Ltda., or CPFL Jaguariúna, approved the merger of CPFL Jaguariúna and RGE Sul. As a consequence of this merger, CPFL Jaguariúna was dissolved. This merger aimed to improve our governance structure and increase synergy with the other companies of the CPFL Energia group.
- On November 21, 2017, through the Resolution for Authorization No. 6,723/2017, ANEEL approved our proposal to consolidate the concessions of five of our distribution companies (CPFL Santa Cruz; Companhia Leste Paulista de Energia; Companhia Sul Paulista de Energia; Companhia Luz e Força de Mococa; and CPFL Jaguari, together the Merged Companies), pursuant to Normative Resolution No. 716/2016. Effective as of January 1, 2018, the Merged Companies were merged with and into a company named CPFL Santa Cruz (which company was previously named CPFL Jaguari). This transaction was approved at the Extraordinary General Meetings held on December 31, 2017 at each of the Merged Companies. This merger led to the optimization of our administrative and operational costs and produced large-scale savings and synergy in 2018. See Note 12.5.2 of our audited annual consolidated financial statements for more information.

According to Normative Resolution No. 716/2016, until the first tariff review of the Merged Companies in March 2021, ANEEL may institute a policy that reconciles the variations in the old tariffs for each of the Merged Companies and the new unified tariff for CPFL Santa Cruz over time. ANEEL decided to introduce the unified tariff during the March 2018 tariff adjustment.

- On June 29, 2018, we won the right to conduct transmission activities in Transmission Auction No. 2/2018 held by ANEEL. We were also awarded the concession for the Maracanaú II Substation and segments of transmission lines, located in the state of Ceará.
- On August 31, 2018, at the A-6/2018 energy auction, or the A-6/2018 Energy Auction, CPFL Renováveis sold 28.5 MWavg to be generated by SHPP Lucia Cherobim, located in the state of Paraná, with Installed Capacity of 28.0 MW (16.5 MWavg) and by the Gameleira wind complex, located in the state of Rio Grande do Norte, with Installed Capacity of 69.3 MW (12.0 MWavg). The agreement will be extended for 30 years for SHPP Lucia Cherobim and 20 years for Gameleira wind complex, with energy supply starting on January 1, 2024. SHPP Lucia Cherobim sold 16.5 MWavg at R\$189.95/MWh (base August 2018), with annual adjustments by the IPCA index to the auction ceiling price of R\$290.00/MWh. The Gameleira wind complex sold 12.0 MWavg at R\$89.89/MWh (base August 2018), with annual adjustments by the IPCA index to the auction ceiling price of R\$227.00/MWh. Additionally, the Gameleira wind complex sold its remaining energy in the Free Market.
- On November 26, 2018, SHPP Boa Vista 2 commenced operations, after receiving ANEEL’s authorization for commercial launch on the same date. SHPP Boa Vista 2 is located in the municipality of Varginha, in the state of Minas Gerais, has Installed Capacity of 29.9 MW and a physical guarantee of 15.54 MWavg. Until December 2019, when the A-5/2015 Energy Auction agreement takes effect, the energy generated by SHPP Boa Vista 2 will be supplied to the system and sold in the spot market.
- On December 4, 2018, through the Resolution for Authorization No. 7,499/2018, ANEEL approved our proposal to consolidate the concessions of our two distribution companies (RGE and RGE Sul), pursuant to Normative Resolution No. 716/2016. Effective as of January 1, 2019, RGE was merged with and into RGE Sul, and RGE Sul began doing business under the name RGE. This transaction was approved at the Extraordinary General Meetings held on December 31, 2018 at each of RGE and RGE Sul. As a result of this merger transaction and the related transfer of the assets of RGE to RGE Sul, RGE no longer exists. See “Item 4. Information on the Company—Overview” and Note 12.6.1 of our audited annual consolidated financial statements for more information.
- On December 20, 2018, we won the right to conduct transmission activities through Transmission Auction No. 4/2018 held by ANEEL. In this auction, we also won new Substations and transmission lines in the states of Santa Catarina and Rio Grande do Sul.

The following chart provides an overview of our corporate structure at March 31, 2019:

Notes:

- (1) RGE Sul is held by CPFL Energia (89.0107%) and CPFL Brasil (10.9893%).
- (2) CPFL Soluções = CPFL Brasil + CPFL Serviços + CPFL Eficiência.
- (3) 51.54% stake of the availability of power and energy of Serra da Mesa HPP, regarding the PPA between CPFL Geração and Furnas Centrais Elétricas S.A., or Furnas.

Our core businesses are:

Distribution. In 2018, our four fully-consolidated distribution subsidiaries delivered 45,589 GWh of electricity to 9.6 million consumers primarily in the states of São Paulo and Rio Grande do Sul.

Conventional Generation. At December 31, 2018, our conventional generation subsidiaries had Installed Capacity of 2,172 MW. During 2018, we generated 7,167 GWh of electricity, and we had 9,591 GWh of Assured Energy at December 31, 2018, the amount of energy representing our long-term average electricity production, as established by ANEEL, which is the primary driver of our revenues from generation activities. We hold equity interests in eight Hydroelectric Power Plants: Serra da Mesa, Monte Claro, Barra Grande, Campos Novos, Luiz Eduardo Magalhães-Lajeado, Castro Alves, 14 de Julho and Foz do Chapecó. Although the concession for the Serra da Mesa Hydroelectric Facility is held by another party, Furnas, we are entitled to 51.54% of its Assured Energy. We also own three Thermoelectric Power Plants, Termonordeste, Termoparaíba and Carioba, although the Carioba Thermoelectric Power Plant has been deactivated. In addition, 10 of our 51 Small Hydroelectric Power Plants remain under the management of two of our conventional generation subsidiaries, CPFL Geração and CPFL Centrais Geradoras, and report their results within the Conventional Generation segment. In 2017, we began to report within this business the activities of our two transmission assets held through CPFL Geração, CPFL Piracicaba and CPFL Morro Agudo, both of which are operational.

Renewable Generation. Our indirect subsidiary, CPFL Renováveis, in which we own a 51.56% interest through CPFL Geração, concentrates our activities in energy generation through renewable sources. CPFL Renováveis operates all of our wind farms and Biomass Thermoelectric Power Plants, as well as 40 of our 51 Small Hydroelectric Power Plants. These 40 Small Hydroelectric Power Plants, which are operational, are located in the states of São Paulo, Santa Catarina, Rio Grande do Sul, Minas Gerais, Mato Grosso and Paraná, and have aggregate Installed Capacity of 453.1 MW. One Small Hydroelectric Power Plant (SHPP Lucia Cherobim) is under construction, scheduled to commence operations in 2024, and expected to have Installed Capacity of 28 MW. CPFL Renováveis also has 49 wind farms, located in the states of Ceará, Rio Grande do Norte and Rio Grande do Sul, (i) 45 of which are operational and have aggregate Installed Capacity of 1,309 MW, and (ii) 4 of which make up the Gameleira wind complex and are under construction with operations scheduled to commence operations in 2024, and expected to have an Installed Capacity of 69.3 MW. CPFL Renováveis has 8 operational Biomass Thermoelectric Power Plants, with aggregate Installed Capacity of 370 MW, located in the states of Minas Gerais, Paraná, São Paulo and Rio Grande do Norte. CPFL Renováveis also operates the Tanquinho Solar Power Plant, which is located in the state of São Paulo and has Installed Capacity of 1.1 MWp. At December 31, 2018, our total consolidated Installed Capacity through our Renewable Generation segment (calculated on the basis of our 51.56% interest in CPFL Renováveis) was 1,100 MW, and we expect that our Renewable Generation segment will reach an Installed Capacity of 1,150 MW in 2024. These capacity amounts do not include eventual decreases in our Installed Capacity ballast (limit of energy produced in our

own power plants that we are allowed to sell). Those decreases are calculated by the MME, for power plants participating in the MRE. See “Regulatory Charges—Energy Reallocation Mechanism” for more information about the MRE.

Commercialization. Our commercialization subsidiaries handle our commercialization operations and provide agency services to Free Consumers before the CCEE and other agents, including guidance on their operational requirements. CPFL Brasil, our largest commercialization subsidiary, procures and sells electricity to Free Consumers, other commercialization and generation companies and distribution facilities. In 2018, we sold 20,215 GWh of electricity, of which 20,133 GWh was sold to unaffiliated third parties.

Services. We report the results of our services activities as a separate operating segment. Our activities in this sector include providing electricity-related services, such as project design and construction, to our affiliates and unaffiliated parties.

In addition to our five operating segments above, we consolidate a number of activities known as “Other.” The activities consolidated under Other consist of (i) CPFL Telecom and (ii) our holding company expenses.

Our Strategy

Our overall objective is to be the leading power utility company in South America, supplying reliable electric energy and credible services to our customers while creating value for our shareholders. We seek to achieve these goals in all of our sectors (distribution, conventional generation, renewable generation, commercialization and services) by pursuing operational efficiency (through innovation and technology) and growth (through business synergies and new projects). Our strategies are grounded on financial discipline, social responsibility and enhanced corporate governance. More specifically, our approach involves the following key business strategies:

Complete the development of our existing renewable generation projects, expand our generation portfolio by developing new conventional and renewable energy generation projects and maintain our position as market leader in renewable energy sources. At December 31, 2018, our total consolidated Installed Capacity (calculated on the basis of our 51.56% interest in CPFL Renováveis) was 3,272 MW, of which 2,172 MW was through conventional sources and 1,100 MW through renewable sources. Through CPFL Renováveis, in August 2011 we became the largest renewable energy generation group in Brazil in terms of Installed Capacity and capacity under construction, according to ANEEL. Today, we continue to be the largest energy renewable generation group in terms of Installed Capacity in operation in Brazil, according to ANEEL.

Many of our generation facilities hold long-term PPAs approved by ANEEL, which we believe will ensure us an attractive rate of return on our investment. We have a consolidated portfolio of 1,100 MW (calculated on the basis of our 51.56% interest in CPFL Renováveis). We also have 97 MW under construction and a total portfolio of 2,903 MW of renewable generation projects to be developed by CPFL Renováveis in the coming years. When electricity consumption in Brazil returns to growth, we believe that there will continue to be new opportunities for us to explore investments in additional conventional and renewable generation projects.

To this end, we plan to make capital expenditures aggregating R\$2,117 million in 2019 and R\$2,218 million in 2020. Of total budgeted capital expenditures over this period, R\$4,012 million are expected to be invested in our Distribution segment, R\$203 million in our Renewable Generation segment and R\$25 million in our Conventional Generation segment. In addition, over this period, we plan to invest R\$94 million in our commercialization and services activities. We have already contractually committed to part of these expenditures, particularly in generation projects. See “Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources—Funding Requirements and Contractual Commitments” and “Item 3D. Risk Factors—Risks Relating to our Operations and the Brazilian Power Industry—If we are unable to complete our proposed capital expenditure program in a timely manner, the operation and development of our business may be adversely affected” for more information. Planned capital expenditures for development of our generation capacity, and the related financing arrangements, are discussed in more detail under “Item 4. Information on the Company—Generation of Electricity.”

Focus on further improving our operating efficiency. The distribution of electricity in our distribution concession areas is our largest business segment, representing 66.1% of our consolidated net income in 2018. We continue to focus on improving the quality of our service and maintaining efficient operational costs by exploiting synergies and technologies. We also make an effort to standardize and update our operations regularly, introducing automated systems where possible. We also understand the need to invest in digital assets, such as Smart Grid technology and in 2018 we deployed 1,430 automatic circuit reclosers, or ACRs, bringing the total number of ACRs in our concession areas to 9,889. These ACRs allow greater flexibility in the operation of the electrical system and are supported by our robust proprietary communication infrastructure, including digital radio communication systems, radio frequency mesh and fiber optic network, as well as our partnership with telecommunications utility providers.

Expand and strengthen our commercialization. Free Consumers make up a significant segment of the electricity market in Brazil, representing more than 30% of the market. This percentage may increase in the future as a result of Ordinance No. 514/2018, issued by the MME on December 28, 2018, which lowers the requirements for being a Free Consumer of conventional energy, dropping the minimum contracted energy demand from 3.0 MW to 2.5 MW, effective as of July 1, 2019, and from 2.5 MW to 2.0 MW, effective as of January 1, 2020. Prior to Ordinance No. 514/2018, Free Consumers with contracted energy demands between 0.5 MW and 3.0 MW could only purchase power from special sources (small hydro, solar, wind and biomass sources). Through our subsidiary CPFL Brasil, our commercialization subsidiary, we are focusing on signing bilateral contracts with former customers of our distribution companies that became Free Consumers, in addition to attracting additional Free Consumers from concession areas other than those covered by our distribution companies. In order to achieve this objective, we foster positive relationships with customers by providing dedicated key account managers, CCEE operational support and PPAs customized to each consumer profile.

Position ourselves to take advantage of consolidation in our industry by using our experience in successfully integrating and restructuring other operations. We believe that further stabilization of the regulatory environment in the Brazilian power industry in future may lead to substantial consolidation in the generation, transmission and, particularly, the distribution sectors. Given our financial strength and managerial expertise, we believe that we are well-positioned to take advantage of this consolidation. If promising assets are available on attractive terms, we may make acquisitions that complement our existing operations and afford us and our consumers further opportunities to take advantage of economies of scale.

Strategy and management for sustainable development. We maintain a strategic focus on a low carbon business portfolio and climate change projects. We aim to strengthen our integrated business management through short- and medium-term economic-financial and socio-environmental key performance indicators and targets, as well as long-term strategic objectives aligned with the SDGs and other national and international commitments.

Maintain a high level of social responsibility in the communities in which we operate. We aim to hold our business operations to the highest standards of social responsibility and sustainable development. We also support initiatives to advance the economic, cultural and social interests of the communities in which we operate and contribute effectively to their further development.

Follow enhanced corporate governance standards. We are dedicated to maintaining the highest levels of management transparency and corporate governance, providing equitable shareholder rights and, through various measures, including the increase of our free float and the liquidity of our shares, seeking value for our shareholders.

Our Service Territory

Distribution

We are one of the largest electricity distributors in Brazil, based on the amount of electricity we delivered in 2018. Our four distribution subsidiaries together supply electricity to a region covering 300,593 square kilometers, primarily in the states of São Paulo and Rio Grande do Sul. Their concession areas include 687¹ municipalities and a population of 22.0 million people. Together, they provided electricity to 9.6 million consumers as of December 31, 2018. Our four distribution subsidiaries distributed 14.2% of the total electricity distributed in Brazil in 2018, based on data from the EPE.

Distribution Companies

We have four distribution subsidiaries:

CPFL Paulista. CPFL Paulista supplies electricity to a concession area covering 90,485 square kilometers in the state of São Paulo with a population of 10.2 million people. Its concession area covers 234 municipalities, including the

cities of Campinas, Bauru, Ribeirão Preto, São José do Rio Preto, Araraquara and Piracicaba. CPFL Paulista had 4.5 million consumers at December 31, 2018. In 2018, CPFL Paulista distributed 20,540 GWh of electricity. Considering CPFL Paulista's sales in its concession area, including sales to Captive Consumers and TUSD, CPFL Paulista sold 30,568 GWh of electricity in 2018, accounting for 23.2%² of the total electricity distributed in the state of São Paulo and 6.5% of the total electricity distributed in Brazil during the year.

1 This total refers to the total number of municipalities situated within our subsidiaries' concession areas. In addition, we serve consumers located in municipalities outside of our concession areas in cases where those consumers are not served by the local concessionaire.

2 Based on preliminary data as disclosed by the EPE on February 19, 2019. Final data is expected to be available in the second half of 2019.

CPFL Piratininga. Companhia Piratininga de Força e Luz, or CPFL Piratininga, supplies electricity to a concession area covering 6,954 square kilometers in the southern part of the state of São Paulo with a population of 3.8 million people. Its concession area covers 27 municipalities, including the cities of Santos, Sorocaba and Jundiaí. CPFL Piratininga had 1.7 million consumers at December 31, 2018. In 2018, CPFL Piratininga distributed 7,886 GWh of electricity. Considering CPFL Piratininga's sales in its concession area, including sales to Captive Consumers and TUSD, CPFL Piratininga sold 14,140 GWh of electricity in 2018, accounting for 10.7%² of the total electricity distributed in the state of São Paulo and 3.0% of the total electricity distributed in Brazil during the year.

RGE. RGE supplies electricity to a concession area covering 182,904 square kilometers in the state of Rio Grande do Sul with a population of 6.8 million people. Its concession area covers 381 municipalities, including the cities of Canoas, São Leopoldo, Novo Hamburgo, Santa Maria, Uruguaiana, Caxias do Sul, Gravataí, Passo Fundo and Bento Gonçalves. RGE had 2.9 million consumers at December 31, 2018. In 2018, RGE distributed 14,905 GWh of electricity. Considering RGE's sales in its concession area, including sales to Captive Consumers and TUSD, RGE sold 19,629 GWh of electricity in 2018, accounting for 64.9%² of the total electricity distributed in the state of Rio Grande do Sul and 4.2% of the total electricity distributed in Brazil during the year. As of January 1, 2019, RGE (previously named RGE Sul) is the surviving entity of its merger in December 2018 with our previous distribution company Rio Grande Energia S.A. See “—Overview” for more information regarding the merger.

CPFL Santa Cruz. CPFL Santa Cruz supplies electricity to a concession area covering 20,249 square kilometers, which includes 45 municipalities in the northwest part of the state of São Paulo, three municipalities in the state of Paraná and 3 municipalities in the state of Minas Gerais. In 2018, CPFL Santa Cruz distributed 2,258 GWh of electricity to 0.5 million consumers. Considering CPFL Santa Cruz's sales in its concession area, including sales to Captive Consumers and TUSD, CPFL Santa Cruz sold 2,876 GWh of electricity in 2018, accounting for 2.2%² of the total electricity distributed in the state of São Paulo and 0.6% of the total electricity distributed in Brazil during the year.

CPFL Santa Cruz is the surviving entity of the merger of our five previous distribution companies CPFL Santa Cruz; Companhia Leste Paulista de Energia; Companhia Sul Paulista de Energia; Companhia Luz e Força de Mococa; and CPFL Jaguari. On December 9, 2015, the concessions held by the Merged Companies were extended to July 2045. See “—Our Concessions and Authorizations—Concessions” for more information on the extension of these concessions.

Distribution Network

Our four distribution subsidiaries operate distribution lines with voltage levels ranging from 11.9 kV to 138 kV. These lines distribute electricity from the connection point with the Basic Network to our power Substations, in each of our concession areas. All consumers that connect to these distribution lines, including Free Consumers and other concessionaires, are required to pay a tariff for using the system, the TUSD.

Each of our subsidiaries has a distribution network consisting of a widespread network of predominantly overhead lines and Substations having successively lower voltage ranges. Consumers are classified in different voltage levels based on their consumption of, and demand for, electricity. Large industrial and commercial consumers receive electricity at High Voltage ranges (up to 138 kV) while smaller industrial, commercial and residential consumers receive electricity at lower voltage ranges (2.3 kV and below).

2 Based on preliminary data as disclosed by the EPE on February 19, 2019. Final data is expected to be available in the second half of 2019.

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At December 31, 2018, our distribution networks consisted of 323,979 kilometers of distribution lines, including 464,627 distribution transformers, and 12,564 km of High Voltage distribution lines between 34.5 kV and 138 kV. At that date, we had 548 transformer Substations for transforming High Voltage into Medium Voltages for subsequent distribution, with total transforming capacity of 18,517 mega-volt amperes. Of the industrial and commercial consumers in our concession area, 381 had 69 kV, 88 kV or 138 kV high-voltage electricity supplied through direct connections to our High Voltage distribution lines.

System Performance

Electricity Losses

There are two types of electricity losses: technical losses and commercial losses. Technical losses are those that occur in the ordinary course of our distribution of electricity. Commercial losses are those that result from illegal connections, fraud, billing errors and similar matters. Electricity loss rates of our distribution subsidiaries compare favorably to the average for other major Brazilian electricity distributors according to the most recent information available from ABRADÉE, an industry association.

We are also actively engaged in efforts to reduce commercial losses from illegal connections, fraud or billing errors. To achieve this, in each of our four distribution subsidiaries, we have deployed trained technical teams to conduct inspections, enhanced monitoring for irregular consumption, increased replacements for obsolete measuring equipment and implemented a system to identify issues in internal processes that could generate losses (*e.g.*, incorrect billing, lack of meter readings, meters with wrong parameters, among others). We conducted 581 thousand fraud inspections in the field during 2018, as a result of which we recovered around R\$65.2 million in additional payments from consumers (retroactive billing relating to losses).

Power Outages

The following table sets forth the frequency and duration of electricity outages per consumer for the years ended December 31, 2018 and 2017 for each of our distribution subsidiaries:

	Year ended December 31, 2018				
	CPFL Paulista	CPFL Piratininga	RGE ⁽⁴⁾	RGE Sul ⁽⁴⁾	CPFL Santa Cruz ⁽³⁾
SAIFI ⁽¹⁾	4.03	3.87	6.30	5.89	5.09
SAIDI ⁽²⁾	6.17	5.92	13.43	15.56	6.01

(1) Frequency of outages per consumer per year (number of outages).

(2) Duration of outages per consumer per year (in hours).

(3) CPFL Santa Cruz, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista merged into CPFL Santa Cruz (formerly CPFL Jaguarí) effective as of January 1, 2018. See “Item 4. Information on the Company—Overview” and Note 12.5.2 of our audited annual consolidated financial statements for more information.

(4) RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019. See “Item 4. Information on the Company—Overview” and Note 12.5.1 of our audited annual consolidated financial statements for more information.

Year ended December 31, 2017

	CPFL Paulista	CPFL Piratininga	RGE ⁽⁴⁾	RGE Sul ⁽⁴⁾	CPFL Santa Cruz ⁽³⁾	CPFL Jaguari ⁽³⁾	CPFL Mococa ⁽³⁾	CPFL Leste Paulista ⁽³⁾	CPFL Sul Paulista ⁽³⁾
SAIFI ⁽¹⁾	4.94	4.45	7.74	7.62	3.69	5.64	6.04	6.19	6.77
SAIDI ⁽²⁾	7.14	6.97	14.17	15.58	4.82	6.31	5.92	7.91	8.20

(1) Frequency of outages per consumer per year (number of outages).

(2) Duration of outages per consumer per year (in hours).

(3) CPFL Santa Cruz, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista merged into CPFL Santa Cruz (formerly CPFL Jaguari) effective as of January 1, 2018. See “Item 4. Information on the Company—Overview” and Note 12.5.2 of our audited annual consolidated financial statements for more information.

(4) RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019. See “Item 4. Information on the Company—Overview” and Note 12.5.1 of our audited annual consolidated financial statements for more information.

We seek to improve the quality and reliability of our power supply, as measured by the frequency and duration of our power outages. According to data from ABRADÉE for 2018, the most recent data available, our frequency and duration of interruptions per consumer in the past few years compare favorably to the averages for other Brazilian distribution companies. In addition, our SAIDI and SAIFI numbers have improved significantly from 2017 to 2018, evidencing the effectiveness of our maintenance and investments in these distribution companies.

Based on data published by ANEEL, the duration and frequency of outages at CPFL Paulista and CPFL Piratininga are among the lowest in Brazil compared to companies of similar size. The duration of outages at RGE are comparatively higher than those at CPFL Paulista and CPFL Piratininga, but they remain in line with the average rate for power companies in Southern Brazil, mainly as a result of the lack of redundancies in its distribution system, the use of medium voltage lines and a lower level of automation in the network. Following our acquisition of RGE Sul on October 31, 2016, we are currently in discussions with the regulator regarding planned investments designed to improve performance indicators, taking into account its current indicators and the characteristics of its concession area.

ANEEL establishes performance indicators per consumer to be complied with by power companies. If these indicators are not reached, we are obliged to reimburse our consumers, and our revenues are negatively affected. In 2017 and 2018, according to data from ANEEL, the amount we reimbursed our consumers remained lower than the average amount reimbursed by power companies of similar size.

Our distribution subsidiaries have construction and maintenance technology that allows for repairs of the electricity network without interruption in electricity service, thereby allowing us to have low rates of scheduled interruption, which amounts to up to 23% of total interruptions in 2018. Unscheduled interruptions due to accidents or natural causes, including lightning storms, fire and wind represented the remainder of our total interruptions. In 2018, we invested R\$1,769.6 million in our Distribution segment, primarily in: (i) expansion, maintenance, improvement, automation, modernization and reinforcement of the electrical system in order to meet market growth; (ii) operational infrastructure; (iii) customer service; and (iv) research and development programs, among other things.

We strive to improve response times for our repair services. The quality indicators for the provision of energy by CPFL Paulista and CPFL Piratininga have maintained levels of excellence while complying with regulatory standards. This was also mainly the result of our efficient operational logistics, including the strategic positioning of our teams and the technology and automation of our network and operation centers, together with a preventive maintenance and conservation plan.

Purchases of Electricity

Most of the electricity we sell is purchased from unrelated parties, rather than generated by our facilities. In 2018, 9.6% of the total electricity our distribution subsidiaries acquired was purchased from our generation subsidiaries (including our joint ventures).

In 2018, we purchased 11,117 GWh of electricity from the Itaipu Power Plant, amounting to 20.0% of the total electricity we purchased. Itaipu is located on the border of Brazil and Paraguay and is subject to a bilateral treaty between the two countries pursuant to which Brazil has committed to purchasing specified amounts of electricity. This treaty will expire in 2023. Electric utilities operating under concessions in the midwest, south and southeast regions of Brazil are required by law to purchase a portion of the electricity that Brazil is obligated to purchase from Itaipu. The amounts that these companies must purchase are governed by take-or-pay contracts with tariffs established in US\$/kW. ANEEL determines annually the amount of electricity to be sold by Itaipu. We pay for energy purchased from Itaipu in accordance with the ratio between the volume established by ANEEL and our statutorily established share, regardless of whether Itaipu generates such amount of electricity, at a price of US\$27.87/kW. Our purchases represent 19.7% of Itaipu's total supply to Brazil. This share was fixed by law according to the amount of electricity sold in 1991. The rates at which companies are required to purchase Itaipu's electricity are established pursuant to the bilateral treaty and fixed to cover Itaipu's operating expenses, payments of principal and interest on its U.S. dollar-denominated debts and the cost of transmitting the power to their concession areas.

The Itaipu Power Plant has an exclusive transmission network. Distribution companies pay a fee for the use of this network.

In 2018, we paid an average of R\$240.03 per MWh for purchases of electricity from Itaipu, compared with R\$199.58 during 2017 and R\$192.99 during 2016. These figures do not include the transmission fee.

We purchased 62,572 GWh of electricity in 2018 from generating companies other than Itaipu, representing 84.9% of the total electricity we purchased. We paid an average of R\$227.30 per MWh for purchases of electricity from generating companies other than Itaipu, compared with R\$191.88 per MWh in 2017 and R\$164.77 per MWh in 2016. See “—The New Regulatory Framework—The Regulated Market” and “—The New Regulatory Framework—The Free Market” for more information on the Regulated Market and the Free Market.

The following table shows amounts purchased from our suppliers in the Regulated Market and in the Free Market, for the periods indicated.

	2018
	GWh
Energy purchased for resale	
Itaipu	11,117
Proinfa Program	1,111
Energy purchased in the Regulated Market, through bilateral contracts and in the spot market	61,461
TOTAL	73,689

	2017
	GWh
Energy purchased for resale	
Itaipu	11,779
Proinfa Program	1,142
Energy purchased in the Regulated Market, through bilateral contracts and in the spot market	65,053
TOTAL	77,974

	2016
	GWh
Energy purchased for resale	
Itaipu	10,497
Spot market/	2,253
Proinfa Program	
Energy purchased in the Regulated Market and through bilateral contracts	51,225
TOTAL	63,975

The provisions of our electricity supply contracts are governed by ANEEL regulations. The main provisions of each contract relate to the amount of electricity purchased, the price, including adjustments for various factors such as inflation indexes, and the duration of the contract.

Beginning in 2013, all distribution companies in Brazil have been required to purchase electricity from generation companies whose concessions were renewed in accordance with Law 12,783/13. The tariffs and volumes of electricity to be purchased by each distribution company, as well as the provisions of the applicable agreements between the generation and distribution companies, were set by ANEEL in the law. Since distribution companies are required to contract in advance, through public auctions, for 100% of their forecast electricity needs and are only authorized to pass through the cost of up to 105% of this electricity to consumers, any involuntary quota to be purchased from generation companies whose concessions were renewed under Law 12,783/13 that takes a distributor's energy volume to more than 105% of its forecast would lead to additional costs for the distributor. As a result, Normative Resolution No. 706 of March 29, 2016 provided that the costs resulting from involuntary purchase quotas can be passed on to consumers, and the energy volume can be offset from electricity auctions from existing power generation facilities in the following years. See "Item 3. Key Information—Risk Factors—Our operating results depend on prevailing hydrological conditions. Poor hydrological conditions may affect our results of operations" and "Item 3. Key Information—Risk Factors—In our Distribution business, we are required to forecast demand for electricity in the market. If actual demand is different from our forecast, we could be forced to purchase or sell electricity in the spot market at prices that could lead to additional costs for us, which we may not be able to fully pass on to customers" for more information.

On June 10, 2018, ANEEL issued Normative Resolution No. 824/2018 establishing a new mechanism, called the Surplus Selling Mechanism, to allow the sale of surplus electricity purchased by distributors to Free and Special Consumers, generators and self-generators. The Surplus Selling Mechanism is voluntary for sellers and purchasers and is set to take place periodically several times per year through 12-month, 6-month and 3-month agreements, with settlement at the equilibrium price set for each submarket and energy type. The first two Surplus Selling Mechanisms were held on January 4, 2019 and March 29, 2019; we participated in both.

Transmission Tariffs. In 2018, we paid a total of R\$2,372 million in tariffs for the use of the transmission network, including Basic Network tariffs, connection tariffs and transmission of high-voltage electricity from Itaipu at rates set by ANEEL.

Consumers and Tariffs

Consumers

We classify our consumers into five principal categories. See Note 25 to our audited annual consolidated financial statements for a breakdown of our sales by category.

- ***Industrial consumers.*** Sales to final industrial consumers accounted for 17.9% of revenues from electricity sales in our Distribution segment in 2018.
- ***Residential consumers.*** Sales to final residential consumers accounted for 46.9% of our revenues from electricity sales in our Distribution segment in 2018.
- ***Commercial consumers.*** Sales to final commercial consumers, which include service businesses, universities and hospitals, accounted for 20.9% of our revenues from electricity sales in our Distribution segment in 2018.
- ***Rural consumers.*** Sales to final rural consumers accounted for 4.6% of our revenues from electricity sales in our Distribution segment in 2018.
- ***Other consumers.*** Sales to other consumers, which include public and municipal services such as street lighting, accounted for 9.7% of our revenue of electricity sales in our Distribution segment in 2018.

Retail Distribution Tariffs. We classify our consumers into two different groups, Group A consumers and Group B consumers, based on the voltage level at which electricity is supplied to them. Each consumer is placed in a certain tariff level defined by law and based on its respective classification. Some discounts are available depending on the consumer classification, tariff level or environment for trading (Free Consumers and generators). Group B consumers pay higher tariffs. Tariffs in Group B vary by type of consumer (residential, rural, other categories and public lighting). Consumers in Group A pay lower tariffs, decreasing from A4 to A1, because they are supplied electricity at higher voltages, which requires lower use of the energy distribution system. The tariffs we charge for sales of electricity to Final Consumers are determined pursuant to our concession agreements and regulations ratified by ANEEL. These concession agreements and related regulations establish a cap on tariffs that provides for annual, periodic and extraordinary adjustments. See “—The Brazilian Power Industry” for a discussion of the regulatory regime applicable to our tariffs and their adjustment.

Group A consumers receive electricity at 2.3 kV or higher. Tariffs for Group A consumers are based on the voltage level at which electricity is supplied, and the time of day electricity is supplied. The consumers may opt for a different tariff applicable in peak periods in order to optimize the use of the electric network. Tariffs for Group A consumers consist of two components: the TUSD and the tariff for energy consumption, or TE. The TUSD, expressed in *reais* per kW, is based on: (i) the electricity demand contracted by the party connected to the system; (ii) certain regulatory charges; and (iii) technical and non-technical losses of energy on the distribution system. The TE, expressed in *reais* per MWh, is based on the amount of electricity actually consumed. These consumers may opt to purchase electricity in the Free Market under the New Regulatory Framework. See “—The New Regulatory Framework” for more information.

Group B consumers receive electricity at less than 2.3 kV (220V and 127V). Tariffs for Group B consumers are charged for the tariff for using the distribution system and also for energy consumption. Both are charged in R\$/MWh.

The following tables set forth our average retail prices for each consumer category for 2018 and 2017. These prices include taxes (ICMS, PIS and COFINS) and were calculated based on our revenues and the volume of electricity sold in 2018 and 2017.

Year ended December 31, 2018

	CPFL Paulista	CPFL Piratininga	RGE ⁽²⁾⁽³⁾	RGE Sul ⁽²⁾	CPFL Santa Cruz ⁽¹⁾	CPFL Leste Paulista ⁽¹⁾	CPFL Sul Paulista ⁽¹⁾	CPFL Jaguari ⁽¹⁾	CPFL Mococa ⁽¹⁾
	(R\$/MWh)								
Residential	639.65	673.63	820.70	757.09	666.20	(1)	(1)	(1)	(1)
Industrial	581.90	592.27	669.67	561.23	543.21	(1)	(1)	(1)	(1)
Commercial	611.34	624.76	812.30	730.86	632.51	(1)	(1)	(1)	(1)
Rural	362.50	420.49	365.84	386.52	403.56	(1)	(1)	(1)	(1)
Other	469.08	457.57	444.47	315.12	404.96	(1)	(1)	(1)	(1)
Average	583.47	620.97	665.83	572.79	555.37	(1)	(1)	(1)	(1)

Year ended December 31, 2017

	CPFL Paulista	CPFL Piratininga	RGE ⁽²⁾	RGE Sul ⁽²⁾	CPFL Santa Cruz ⁽¹⁾	CPFL Leste Paulista ⁽¹⁾	CPFL Sul Paulista ⁽¹⁾	CPFL Jaguari ⁽¹⁾	CPFL Mococa ⁽¹⁾
	(R\$/MWh)								
Residential	572.79	585.98	667.24	708.93	646.21	620.96	632.70	590.43	664.57
Industrial	554.80	493.84	500.10	583.76	566.56	518.58	452.88	461.75	565.57
Commercial	563.84	532.64	652.20	706.58	632.20	583.81	585.65	532.52	630.32
Rural	322.43	361.45	339.60	271.45	388.09	360.66	386.92	362.72	407.56
Other	425.13	383.42	264.44	607.72	340.23	442.23	425.43	410.70	449.41
Average	531.64	533.29	502.12	580.28	522.10	507.47	529.24	496.70	567.33

(1) On November 21, 2017, through the Resolution for Authorization No. 6,723/2017, ANEEL approved our proposal to consolidate the concessions of five of our distribution companies (CPFL Santa Cruz; Companhia Leste Paulista de Energia; Companhia Sul Paulista de Energia; Companhia Luz e Força de Mococa; and CPFL Jaguari, together the Merged Companies), pursuant to Normative Resolution No. 716/2016. Effective as of January 1, 2018,

the Merged Companies were merged with and into a company named CPFL Santa Cruz (which company was previously named CPFL Jaguari). See “Item 4. Information on the Company—Overview” and Note 12.5.2 of our audited annual consolidated financial statements for more information.

(2) On December 4, 2018, through the Resolution for Authorization No.7,499/2018, ANEEL approved our proposal to consolidate the concessions of our two distribution companies (RGE and RGE Sul), pursuant to Normative Resolution No. 716/2016. RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019. See “Item 4. Information on the Company—Overview” and Note 12.6.1 of our audited annual consolidated financial statements for more information.

(3) Considers ten months of RGE before the consolidation of the concessions as described in item (2) above.

Under current regulations, residential consumers may be eligible to pay a reduced TSEE tariff. Families eligible to benefit from the TSEE are (i) those registered with the Brazilian government’s Single Registry of Social Programs (*Cadastro Único para Programas Sociais do Governo Federal*) with monthly per capita income at or below half the national minimum wage and (ii) those who receive the Continued Social Assistance Provision Benefits (*Benefício da Prestação Continuada da Assistência Social*). Discounts range from 10% to 65% on energy consumption per month. In addition, these residential consumers are not required to pay the Proinfa Program charge or any extraordinary tariff approved by ANEEL. Indigenous peoples and residents of traditional rural communities (*quilombos*) receive free electricity up to maximum consumption of 50 kWh.

TUSD. The TUSD tariffs, which are set by ANEEL, consist of the three tariffs described under “Item 4. Information on the Company—System Tariffs—TUSD.” In 2018, tariff revenues for the use of our network by Free Consumers and Captive Consumers amounted to R\$13,843 million. The average tariff for the use of our network was R\$131.10/MWh and R\$105.73/MWh in 2018 and 2017, respectively, including the TUSD we charge to other distributors connected to our Distribution Networks.

Billing Procedures

The procedure we use for billing and payment for electricity supplied to our consumers is determined by consumer and tariff categories. Meter readings and invoicing take place on a monthly basis for Low Voltage consumers, with the exception of rural consumers, whose meters are read in intervals varying from one to two months, as authorized by relevant regulation, and consumers of our subsidiary RGE, whose meters are read in intervals varying from one to three months. Bills are issued from meter readings or, if meter readings are not possible, from the average of monthly consumption. Low voltage consumers are billed within a maximum of three business days after the meter reading, with payment required within a minimum of five business days after the invoice presentation date. In case of nonpayment, we send the consumer a notice of nonpayment with the following month’s invoice, and we allow the consumer up to 15 days to settle the amount owed to us. If payment is not received within three business days after that 15-day period, the consumer’s electricity supply may be suspended. We may also take other measures, such as inclusion of the consumer in the list of debtors of credit reporting agencies, or extrajudicial or judicial collection through collection agencies.

High Voltage consumers are read and billed on a monthly basis with payment required within five business days after the receipt of an invoice. In the event of nonpayment, we send the consumer a notice two business days after the due date, giving a deadline of 15 days to make payment. If payment is not made within three business days after that 15-day period, the consumer’s service is discontinued.

According to the most recent data from ABRADÉE, the percentage of customers in default for our three largest distribution subsidiaries compare favorably to the average for other major Brazilian electricity distributors. For this purpose, consumers in default are consumers whose bills are over 90 days overdue. Bills due and outstanding for over 360 days are classified as irrecoverable.

Customer Service

We strive to provide high-quality customer service to our distribution consumers. We provide customer service 24 hours a day, seven days a week. The requests are received using a variety of platforms such as call centers, our website, SMS and our smartphone application. In 2018, we responded to 67.9 million customer requests. We also provide customer service through our branch offices, which handled 4.2 million customer requests in 2018. The growth in electronic requests has allowed us to reduce our customer service costs and provide customer service through our call center to a larger number of customers without access to the Internet. Following receipt of a customer service request, we dispatch our technicians to make any necessary repairs.

Generation of Electricity

We are actively expanding our generating capacity. In accordance with Brazilian regulations, revenues from generation are based mainly on the Assured Energy of each facility, rather than its Installed Capacity or actual output. Assured Energy is a fixed output of electricity established by the Brazilian government in the relevant concession agreement. For certain companies, actual output is determined periodically by the ONS in view of demand and hydrological conditions. Provided that a generation facility has sold its electricity and participates in the MRE, it will

receive at least the revenue amount that corresponds to its Assured Energy, even if it does not actually generate all the energy. See “—The Brazilian Power Industry—Generation Scaling Factor” for more information. Conversely, if a generation facility’s output exceeds its Assured Energy, its incremental revenue is equal only to the costs associated with generating the additional energy.

Most of our Hydroelectric Power Plants are members of the MRE, a system by which hydroelectric generation facilities share the hydrological risks of the Interconnected Power System. Our total Installed Capacity in our Conventional Generation and Renewable Generation segments was 3,272 MW as of December 31, 2018. Most of the electricity we produce comes from our Hydroelectric Power Plants. We generated a total of 10,648 GWh in 2018, 10,137 GWh in 2017 and 12,568 GWh in 2016.

If less than the total Assured Energy is being generated (*i.e.*, if the GSF is less than 1.0), hydroelectric companies must purchase energy in the spot market to cover the energy shortage and meet their Assured Energy volumes under the MRE. From 2005 to 2012, the GSF remained above 1.0. Beginning in 2013, however, this scenario began to change, which led the GSF to remain below 1.0 for the whole of 2014, and in 2015 it ranged from 0.783 to 0.825, requiring electricity generators to purchase energy in the spot market, thereby incurring significant costs. Under Federal Law 13,203, however, we renegotiate our PPAs for the Regulated Market in December 2015, setting the GSF cost at a risk premium of R\$9.50/MWh per year through the end of the PPA or the end of the concession, whichever occurs sooner. See “—The Brazilian Power Industry—Generation Scaling Factor” for more information on the GSF and Federal Law 13,204.

Conventional Generation

Hydroelectric Power Plants

At December 31, 2018, our subsidiary CPFL Geração owned a 51.54% interest in the Assured Energy from the Serra da Mesa Power Plant. Through its generation subsidiaries CERAN, BAESA, ENERCAN and Chapecoense, CPFL Geração also owned interests in the Monte Claro, Barra Grande, Campos Novos, Castro Alves, 14 de Julho and Foz do Chapecó Power Plants, which have been operational since December 2004, November 2005, February 2007, March 2008, December 2008 and October 2010, respectively. Through CPFL Jaguari Geração, we owned a 4.15% (59.93% of 6.93%) interest in the Assured Energy from the Luis Eduardo Magalhães Power Plant.

All Installed Capacity and Assured Energy numbers stated in the discussion below refer to the full capacity of the plant in question rather than our consolidated share of such energy, which reflects our interest in the plant.

Serra da Mesa. Our largest Hydroelectric Facility in operation is the Serra da Mesa facility, which we acquired in 2001 from ESC Energia S.A. (formerly VBC), one of our shareholders. Furnas began construction of the Serra da Mesa facility in 1985. In 1994, construction was suspended due to a lack of resources, which led to a public bidding procedure in order to resume construction. Serra da Mesa currently consists of three Hydroelectric Facilities located on the Tocantins River in the state of Goiás. The Serra da Mesa facility began operations in 1998 and has a total Installed Capacity of 1,275 MW. The concession for the Serra da Mesa facility is owned by Furnas, which is also the operator, and we own part of the facility. Under Furnas’ agreement with us, which has a 30-year term commencing in 1998, we have the right to 51.54% of the Assured Energy of the Serra da Mesa facility until 2028 even if, during the term of the concession, there is an expropriation or forfeiture of the concession or the term of the concession expires. We sell all of such electricity to Furnas under an electricity purchase contract that was renewed in March 2014 at a price that is adjusted annually based on the IGP-M index. This contract expires in 2028. Our share of the Installed Capacity and Assured Energy of the Serra da Mesa facility is 657 MW and 2,878 GWh/year, respectively. On May 30, 2014, the concession held by Furnas was formally extended to November 12, 2039. In 2016, due to the renegotiated GSF, the Serra da Mesa concession was extended to September 30, 2040, in accordance with ANEEL’s Authoritative Resolution No. 6,055/2016.

CERAN Hydroelectric Complex. We own a 65.0% interest in CERAN, a subsidiary that was granted a 35-year concession in March 2001 to construct, finance and operate the CERAN hydroelectric complex. The other

shareholders are CEEE (with 30.0%) and Desenvix (with 5.0%). The CERAN hydroelectric complex consists of three Hydroelectric Power Plants: Monte Claro, Castro Alves and 14 de Julho. The CERAN hydroelectric complex is located on the Antas River 120 km north of Porto Alegre, near the city of Bento Gonçalves, in the state of Rio Grande do Sul. The entire CERAN hydroelectric complex has an Installed Capacity of 360 MW and estimated Assured Energy of 1,450 GWh per year, of which our share is 942 GWh/year. We sell our participation in the Assured Energy of this complex to affiliates in our group. These facilities are operated by CERAN, under CPFL Geração's supervision.

Monte Claro. Monte Claro's first generating unit, which became operational in 2004, has Installed Capacity of 65 MW and the second generating unit, which became operational in 2006, also has an Installed Capacity of 65 MW, giving total Installed Capacity of 130 MW and Assured Energy of 491 GWh per year.

Castro Alves. In March 2008, the first generation unit of the Castro Alves Power Plant became operational, with total Installed Capacity of 43.4 MW. In April 2008, the second generation unit became operational, with Installed Capacity of 43.4 MW. In June 2008, this plant became fully operational (when the third generation unit started operations), giving total Installed Capacity of 130 MW and annual Assured Energy of 542 GWh per year.

14 de Julho. The first generation unit of the 14 de Julho Power Plant became operational in December 2008, and the second generation unit became fully operational in March 2009. This plant has a total Installed Capacity of 100 MW and an annual Assured Energy of 416 GWh.

We are currently assessing alternative measures in order to improve our financial and operational results. Discussions are currently underway with ANEEL and other entities in the transmission sector, regarding the conditions under which we will transfer the Monte Claro Substation to the Basic Network, which could eliminate maintenance costs and our responsibility for operation of the Substation.

Barra Grande. This facility became fully operational in May 2006 with a total Installed Capacity of 690 MW and total Assured Energy of 3,266 GWh per year. CPFL Geração owns a 25.01% interest in this plant. The other shareholders of the joint venture are Alcoa (42.18%), CBA (*Companhia Brasileira de Alumínio*) (15.0%), DME (*Departamento Municipal de Eletricidade de Poços de Caldas*) (8.82%), and Camargo Corrêa Cimentos S.A. (9.0%). We sell our participation in the Assured Energy of this facility to affiliates in our group.

Campos Novos. We own a 48.72% interest in ENERCAN, a joint venture formed by a consortium of private and public sector companies that was granted a 35-year concession in May 2000 to construct, finance and operate the Campos Novos Hydroelectric Facility. The plant was constructed on the Canoas River in the state of Santa Catarina, and became fully operational in May 2007 with a total Installed Capacity of 880 MW and Assured Energy of 3,326 GWh per year, of which our interest is 1,613 GWh per year. The other shareholders of ENERCAN are CBA (33.14%), Votorantim Metais Níqueis S.A. (11.63%) and CEEE (6.51%). The plant is operated by ENERCAN under CPFL Geração's supervision. We sell our participation in the Assured Energy of this joint venture to affiliates in our group.

Foz do Chapecó. We own a 51.0% interest in Chapecoense, a joint venture formed by a consortium of private and public sector companies that was granted a 35-year concession in November 2001 to construct, finance and operate the Foz do Chapecó Hydroelectric Power Plant. The remaining 49.0% interest in the joint venture is divided among Furnas, which holds a 40.0% interest, and CEEE, which holds a 9.0% interest. The Foz do Chapecó Hydroelectric Power Plant is located on the Uruguay River, on the border between the states of Santa Catarina and Rio Grande do Sul. The Foz do Chapecó Power Plant became fully operational in March 2011 with 855 MW of total Installed Capacity and Assured Energy of 3,742 GWh per year. We sell 40.0% of our share in the Assured Energy of this project to affiliates in our group and 60.0% through CCEARs. In January 2013, at the request of ANEEL, we began the process of transferring the Foz do Chapecó Substation and exclusive transmission lines to the Basic Network, thereby eliminating maintenance costs and responsibility for operation of these assets, and reducing the transmission line energy loss factor (regulatory loss). The transfer process was completed in October 2016.

Luis Eduardo Magalhães. We own a 4.15% (59.93% of 6.93%) interest in the Assured Energy from the Luis Eduardo Magalhães Power Plant, also known as UHE Lajeado. The plant is located on the Tocantins River in the state of Tocantins and became fully operational in November 2002 with a total Installed Capacity of 902.5 MW and

Assured Energy of 4,425 GWh per year. The plant was built by Investco S.A., a consortium comprised of Lajeado Energia, EDP (*Energias de Portugal*), CEB (*Companhia Energética de Brasília*) and Paulista Lajeado (which we acquired in 2007).

Thermoelectric Power Plants

We operate three Thermoelectric Power Plants. Termonordeste, which commenced operations in December 2010, and Termoparaíba, which commenced operations in January 2011 under ANEEL authorizations, are powered by fuel oil from the EPASA complex, with total Installed Capacity of 341.5 MW and total Assured Energy of 2,169.9 GWh per year. On December 31, 2018, we owned an aggregate 53.34% interest in Termonordeste and Termoparaíba. The Termonordeste and Termoparaíba Thermoelectric Power Plants are located in the city of João Pessoa, in the state of Paraíba. The electricity from these power plants was sold in CCEARs, and part of this energy was purchased by our own distributors. In 2018, ANEEL passed Resolution No. 822/2018, allowing thermoelectric power plants to perform, and be compensated for, the recovery of system operational reserves for frequency control as an ancillary service. Thus, since October 2018, every week, thermoelectric power plants can offer prices up to 130% of their current dispatch cost and ONS schedules the dispatch considering the lowest cost for the electrical system. Resolution No. 822/2018 represents recognition by ANEEL of the additional expenses incurred by thermoelectric power plants in order to respond to ONS's intermittent dispatches due to the variation in energy generation by wind farms in connection with operative restraints on hydropower plants. The 30% increase in price over the power plants' operational cost is being tested by ANEEL while the agency examines the prices offered by Thermoelectric Power Plants, and is intended to allow for compensation for the maintenance and fuel consumption arising from the power plants' need to start and stop operations at various times throughout any particular week. Before Resolution No. 822/2018, such additional costs were borne by the thermoelectric power plants for purposes of providing an ancillary service to customers for frequency control. Our EPASA complex has chosen to perform such ancillary service, resulting in additional revenues of R\$21.4 million in 2018.

The remaining facility, Carioba, has an Installed Capacity of 36 MW; however, it has been officially deactivated since October 19, 2011, as provided for in Order No. 4,101 of 2011. We have applied to terminate the Carioba concession since ANEEL reduced the subsidy associated with the CCC Account. ANEEL is currently analyzing this early termination application. Commencing in 2016, we have ceased to include Carioba in our installed capacity since the facility is inactive.

Small Hydroelectric Power Plants

At December 31, 2018, 10 of our 51 Small Hydroelectric Power Plants were under the management of two of our conventional generation subsidiaries, CPFL Geração and CPFL Centrais Geradoras. These 10 Small Hydroelectric Power Plants reported their results within the Conventional Generation segment. They consist of two groups of facilities:

Nine of these facilities were originally managed together with their associated distribution companies within our Distribution segment. Law No. 12,783 of January 11, 2013 specified the conditions for the renewal of generation, transmission and distribution concessions obtained under articles 17, 19 or 22 of Law No. 9,074 of July 7, 1995. Under Law No. 12,783/13, these concessions may be extended once, at the discretion of the Brazilian government, for up to 30 years, in order to ensure the continuity and efficiency of the services rendered and of low tariffs. In addition, Law No. 12,783/13 provided that holders of concessions that were due to expire in 2015, 2016 and 2017 could apply for early renewal in 2013, subject to certain conditions. However, Resolution No. 521/12 published by ANEEL on December 14, 2012 established that the generation concessions to be renewed under Law No. 12,783/13 must be partitioned into separate operating entities in cases where the Installed Capacity of the original concessionaire entity exceeded 1 MW. On October 10, 2012, in anticipation of Law 12,783/13, we applied for early renewal of the concessions held by our distribution subsidiaries CPFL Santa Cruz, CPFL Jaguari, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista (now all merged into CPFL Santa Cruz), which were originally granted in 1999 for a 16-year term. Pursuant to the partition requirement under Resolution No. 521/12, we were required to separate the generation and distribution activities of three of the plants, Rio do Peixe I and II and Macaco Branco, whose generation facilities were transferred to CPFL Centrais Geradoras on August 29, 2013. At that time, our Management decided for operational reasons to partition the generation and distribution activities of the remaining six facilities held by the four distribution subsidiaries (Santa Alice, Lavrinha, São José, Turvinho, Pinheirinho and São Sebastião), the generation facilities of which were also transferred to CPFL Centrais Geradoras. In addition, the concession agreements for Macaco Branco and Rio do Peixe were transferred from CPFL Centrais Geradoras to CPFL Geração on September 30, 2015 (see “–Overview”).

During 2014, the concessions for the Salto do Pinhal and Ponte do Silva facilities were terminated under Authorizing Resolution No. 4,559/2014, which determined that concessions for inactive Micro Hydroelectric Power Plants would be extinguished without reversion of the respective assets to the government.

The remaining facility, Cariobinha, has been held by CPFL Geração since the signing of the concession contract. Since 2016, we have ceased to include Cariobinha in our Installed Capacity and Assured Energy data since the facility is inactive. We also applied to terminate the Cariobinha concession. In response to our termination application, on July 17, 2018, MME published Order No. 304/2018, which terminated the Cariobinha concession, without reversal of assets. Pursuant to the local law which allowed us to include Cariobinha in our concession, we are arranging to return Cariobinha’s facility to the municipality of Americana, where it is installed.

On December 4, 2012, the concessions of the Rio do Peixe I and II and Macaco Branco Small Hydroelectric Power Plants were renewed for 30 years under Law No. 12,783/13. The renewals of these concessions were subject to the following conditions:

- (i) The energy generated must be sold to all distribution companies in Brazil according to quotas defined by ANEEL (previously, energy was sold only to the related distribution subsidiary);
- (ii) The concessionaire's annual revenue is set by ANEEL, subject to tariff reviews (previously, the energy prices were defined contractually and adjusted according to the IPCA); and
- (iii) The assets that remained unamortized at the renewal date would be indemnified, and the indemnification payment would not be considered as annual revenue. The remuneration relating to new assets or existing assets that were not indemnified would be considered as annual revenue. Rio do Peixe I and II received a total of R\$34.4 million in indemnification payments. The assets of Macaco Branco had been fully amortized, and therefore generated no indemnification payment.

The following table sets forth certain information relating to our principal conventional generation facilities in operation and the Small Hydroelectric Power Plants that reported their results within the Conventional Generation segment as of December 31, 2018:

	Holding company	Partic.	Capacity (MW)		Assured Energy (GWh)		Placed in service	Concession expires
			Our share	TOTAL	Our share	TOTAL		
Hydroelectric plants:								
Serra da Mesa	CPFL Geração	51.54%	657.1	1,275.0	2,878.3	5,584.5	1998	2039 ⁽¹⁾
Monte Claro	CPFL Geração	65.00%	84.5	130.0	319.4	491.4	2004	2036
Barra Grande	CPFL Geração	25.01%	172.5	690.0	816.6	3,265.7	2005	2036
Campos Novos	CPFL Geração	48.72%	428.7	880.0	1,620.5	3,326.2	2007	2035
Castro Alves	CPFL Geração	65.00%	84.5	130.0	351.9	541.4	2008	2036
14 de Julho	CPFL Geração	65.00%	65.0	100.0	270.5	416.1	2008	2036
Luis Eduardo Magalhães	Jaguari de Geração	4.15%	37.5	902.5	183.8	4,424.7	2001	2032
Foz do Chapecó	Chapecoense	51.00%	436.1	855.0	1,908.6	3,742.3	2010	2036
SUBTOTAL – Hydroelectric plants			1,966		8,350			
Thermoelectric plants:								
Carioba	CPFL Geração	100%	-	-	-	-	1954	2027 ⁽²⁾
EPASA facilities:								
Termonordeste	CPFL Geração	53.34% ⁽⁴⁾	91.1	170.8	578.5	1,084.5	2010	2042
Termoparaíba		53.34% ⁽⁴⁾	91.1	170.8	578.9	1,085.4	2011	2042

	CPFL Geração							
SUBTOTAL – Thermoelectric plants			182		1,157			
Small Hydroelectric Plants								
Cariobinha	CPFL Geração	100%	-	-	-	-	N/A	2027 ⁽²⁾
Lavrinha	CPFL Centrais Geradoras	100%	0.3	0.3	2.1	2.1	N/A	(3)
Macaco Branco	CPFL Geração	100%	2.4	2.4	14.5	14.5	N/A	2042
Pinheirinho	CPFL Centrais Geradoras	100%	0.7	0.7	4.2	4.2	N/A	(3)
Rio do Peixe I	CPFL Geração	100%	3.1	3.1	3.9	3.9	N/A	2042
Rio do Peixe II	CPFL Geração	100%	15.0	15.0	46.8	46.8	N/A	2042
Santa Alice	CPFL Centrais Geradoras	100%	0.6	0.6	3.6	3.6	N/A	(3)
São José	CPFL Centrais Geradoras	100%	0.8	0.8	2.1	2.1	N/A	(3)
São Sebastião	CPFL Centrais Geradoras	100%	0.7	0.7	4.6	4.6	N/A	(3)
Turvinho	CPFL Centrais Geradoras	100%	0.8	0.8	2.2	2.2	N/A	(3)
SUBTOTAL – Small Hydroelectric Plants			24		84			
TOTAL – Conventional Generation			2,172		9,591			

- (1) The concession for Serra da Mesa is held by Furnas. On May 30, 2014, the concession held by Furnas was formally extended to November 12, 2039. In 2016, due to the renegotiated GSF, the Serra da Mesa concession was extended to September 30, 2040, in accordance with ANEEL's Authoritative Resolution No. 6,055/2016. We have a contractual right to 51.54% of the Assured Energy of this facility, under a 30-year agreement.
- (2) Inactive power plant. Since 2016, we have ceased to include Cariobinha in our Installed Capacity and Assured Energy data since the facility has been inactive. On July 17, 2018, MME published Ordinance n° 304/2018, which terminated the Cariobinha concession, without reversal of assets.
- (3) Hydroelectric projects with an Installed Capacity equal to or less than 5,000 kW that are registered with the regulatory authority and the administrator of power concessions but do not require concession or authorization processes for operating.
- (4) After a capital increase on January 31, 2014, the holdings of certain shareholders of the joint venture EPASA were diluted. As per the actual Shareholders Agreement, these shareholders were entitled to repurchase shares in order to reconstitute their holdings. This right was exercised during February 2015, and as from March 1, 2015, CPFL Geração holds 53.34% of EPASA.

Renewable Generation

At December 31, 2018, through our subsidiary CPFL Geração, we owned a 51.56% interest in CPFL Renováveis, a company resulting from an association with another Brazilian renewable energy producer, ERSA – Energias Renováveis S.A., which holds our subsidiaries engaged in the generation of electricity from renewable sources. Through CPFL Renováveis, in August 2011, we became the largest renewable energy generation group in Brazil in terms of Installed Capacity and capacity under construction, according to ANEEL. We have fully consolidated CPFL Renováveis in our financial statements since August 1, 2011. CPFL Renováveis carried out its initial public offering in July 2013, resulting in a decrease in our shareholding from 63% to 58.84%. On October 1, 2014, CPFL Renováveis acquired 100% of the shares of DESA through an issuance of shares of CPFL Renováveis, resulting in a decrease in our shareholding of CPFL Renováveis from 58.84% to 51.61%. On November 29, 2018, State Grid acquired 243,771,824 common shares of CPFL Renováveis through a mandatory tender offer that State Grid was required to carry out upon gaining control of our company in accordance with applicable Brazilian law. As a result of this mandatory tender offer, State Grid and us, indirectly through our subsidiary CPFL Geração, hold 99.94% of CPFL Renováveis' total capital stock.

CPFL Renováveis invests in independent renewable energy production sources with low environmental and social impact, such as Small Hydroelectric Power Plants, wind farms, Biomass-fueled Thermoelectric Power Plants and photovoltaic solar plants, focusing exclusively on the Brazilian market. CPFL Renováveis has extensive experience in the development, acquisition, construction and operation of electricity-generating plants using renewable energy sources. CPFL Renováveis operates in eight Brazilian states and its business contributes to the local and regional economic and social development.

At the date of this Annual Report, CPFL Renováveis consists of the generation entities described below. All Installed Capacity and Assured Energy numbers stated in the discussion below refer to the full capacity of the plant in question rather than our consolidated share of such energy, which only reflects our interest in the plant.

- 31 subsidiaries involved in the generation of electric energy through 41 Small Hydroelectric Power Plants, consisting of (i) 40 SHPPs that are operational, with aggregate Installed Capacity of 453 MW, located in the states of São Paulo, Santa Catarina, Rio Grande do Sul, Paraná, Minas Gerais and Mato

Grosso, and (ii) one SHPP, SHPP Lucia Cherobim, with 28 MW of Installed Capacity, which is under construction and scheduled to commence operations in 2024.

- 45 subsidiaries involved in the generation of electric energy from wind sources. 49 wind farms, located in the states of Ceará, Rio Grande do Norte and Rio Grande do Sul, consisting of (i) 45 wind farms that are operational, with an aggregate Installed Capacity of 1,309 MW, and (ii) four wind farms (Gameleira, Figueira Branca, Farol de Touros and Costa das Dunas), with an aggregate Installed Capacity of 69.3 MW, which are under construction and scheduled to commence operations in 2024.
- Eight subsidiaries involved in the generation of electric energy from biomass, all of which are operational, with total Installed Capacity of 370 MW, located in the states of Minas Gerais, Paraná, São Paulo and Rio Grande do Norte.
- One subsidiary involved in the generation of electric energy from a Solar Power Plant, Tanquinho, which is located in the state of São Paulo and has total Installed Capacity of 1.1 MW. Tanquinho started operations on November 27, 2012 and has the capacity to generate 1.6 GWh/year.

Existing Installed Capacity

The following describes our existing and operational renewable generation plants:

Small Hydroelectric Power Plants

Small Hydroelectric Power Plants are plants with generation capacity between 5 MW and 30 MW and a reservoir area of up to three square kilometers. A typical Small Hydroelectric Power Plant operates under a “run-of-river” system, and as a result, it may experience idleness when the available water flow is less than the turbine inflow capacity. If flows are greater than the equipment’s capacity, water flows through a spillway. Small Hydroelectric Power Plants are allowed to participate in the MRE, and in this case, the amount of energy sold by the power plant depends solely on its certificate of guarantee and not on its individual energy production.

CPFL Renováveis operates 40 of our 51 Small Hydroelectric Power Plants primarily under the concession and registration regime, all located in the states of São Paulo, Minas Gerais, Mato Grosso, Paraná, Santa Catarina and Rio Grande do Sul.

There have been several revisions, mainly consisting of reductions, to CPFL Renováveis’ Assured Energy, on account of reductions in the expected operational performance.

The automation of the power plants allows us to carry out control, supervision and operations remotely. Since CPFL Energia acquired CPFL Renováveis’ renewable business, we have established an operational center for the management and monitoring of our power plants in Jundiaí, in the state of São Paulo. Regarding the remote control, supervision and operation of the wind energy assets, we have also established a remote control center in Fortaleza, in the state of Ceará.

Biomass Thermoelectric Power Plants

Biomass-fueled Thermoelectric Power Plants are generators that use the combustion of organic matter for the production of energy. This organic matter may include products such as sugarcane bagasse, vegetable coal, biogas, black liquor, rice husk and wood chips. Energy fueled by biomass is renewable and creates less pollution than other energy forms, such as those obtained from the use of fossil fuels (petroleum and coal), create. The construction period of Biomass-fueled Thermoelectric Power Plants is shorter than that of Small Hydroelectric Power Plants (from one to two years, on average). The necessary investment per installed MW for the construction of a Biomass-fueled Thermoelectric Power Plant is proportionally lower than the investment for construction of a Small Hydroelectric Power Plant. On the other hand, the operation of a Biomass-fueled Thermoelectric Power Plant is generally more complex, as it involves the acquisition, logistics and production of organic inputs used for power generation. For this reason, the operational costs of Biomass-fueled Thermoelectric Power Plants tend to be higher than the operational costs of Small Hydroelectric Power Plants.

Despite being more complex, Biomass-fueled Thermoelectric Power Plants benefit from: (i) expedited environmental licensing; (ii) abundant fuel in Brazil, which may come from sub-products of other activities (*e.g.*, wood chips); and (iii) proximity to consumers, reducing transmission costs. Fuel acquisition and logistics costs are significantly lower for Biomass-fueled Thermoelectric Power Plants compared to Thermoelectric Power Plants from non-renewable sources. Additionally, even though they are eligible for the Clean Development Mechanism established by the Kyoto Protocol (*Mecanismo de Desenvolvimento Limpo*), or MDL, and the corresponding mechanism established by the Paris Agreement (*Mecanismo de Desenvolvimento Sustentável*), yet to be regulated, and have the potential to generate carbon credits, Biomass-fueled Thermoelectric Power Plants installed in Brazil have encountered difficulties in

obtaining approval for projects due to the issues related to the boiler format and methodology of the approval process.

We currently have eight Biomass-fueled Thermoelectric Power Plants under the authorization regime, located in the states of São Paulo, Minas Gerais, Rio Grande do Norte and Paraná.

CPFL Alvorada. The UTE Alvorada plant is located in the city of Araporã, in the state of Minas Gerais, began operations in November 2013. The total Installed Capacity of UTE Alvorada is 50 MW and Assured Energy is 133.2 GWh. This project has an associated PPA in force until 2032 with CPFL Brasil.

CPFL Bioenergia. In partnership with Baldin Bioenergia, we have constructed a co-generation plant in the city of Pirassununga, in the state of São Paulo, that became operational in August 2010. This co-generation plant has total Installed Capacity of 45 MW. The plant has an Assured Energy of 112.1 GWh and all its electricity is sold to CPFL Brasil.

CPFL Bio Formosa. In 2009, CPFL Brasil established the Baía Formosa power plant (CPFL Bio Formosa), located in the city of Baía Formosa, in the state of Rio Grande do Norte, with total Installed Capacity of 40 MW. The CPFL Bio Formosa plant began operations in September 2011. 11 MWa of energy were sold in the A-5 auction (see “—The New Regulatory Framework—Auctions on the Regulated Market”), with CCEARs in force until 2025.

CPFL Bio Buriti. In March 2010, CPFL Bio Buriti, which was formed to develop electric energy generation projects using sugarcane bagasse, executed a partnership agreement with Grupo Pedra Agroindustrial to develop new biomass generation projects. The CPFL Bio Buriti plant, located in the city of Buritizal, in the state of São Paulo, began its operations in October 2011. The total Installed Capacity of this plant is 50 MW. CPFL Bio Buriti has an associated PPA of 184.1 GWh in force until 2030 with CPFL Brasil.

CPFL Bio Ester. In October 2012, CPFL Renováveis completed the acquisition of the electricity and steam co-generation assets of SPE Lacenas Participações Ltda., which controls the Ester Thermoelectric Power Plant, located in the municipality of Cosmópolis, in the state of São Paulo. The assets have total Installed Capacity of 40 MW. Around 7 MW average of co-generation energy from the Ester Thermoelectric Power Plant was commercialized in the 2007 alternative energy sources auction, for a period of 15 years. The remaining 3.2 MW, on average, of energy was sold on the free market for 21 years.

CPFL Bio Ipê. In March 2010, CPFL Bio Ipê, which was formed to develop electric energy generation projects using sugarcane bagasse, executed a partnership agreement with Grupo Pedra Agroindustrial to develop new biomass generation projects. The CPFL Bio Ipê plant, located in Nova Independência, in the state of São Paulo, began its operations in May 2012. The total Installed Capacity of this plant is 25 MW. This project has an associated PPA of 71.7 GWh in force until 2030 and the energy has been entirely sold to CPFL Brasil.

CPFL Bio Pedra. In March 2010, CPFL Bio Pedra, which we formed to develop electric energy generation projects using sugarcane bagasse, executed a partnership agreement with Grupo Pedra Agroindustrial to develop new biomass generation projects. CPFL Bio Pedra, located in Serrana, in the state of São Paulo, started operations in May 2012 with total Installed Capacity of 70 MW and Assured Energy of 209.4 GWh. The electricity from CPFL Bio Pedra has been sold through an auction held in 2010, with CCEARs in force until 2027.

CPFL Coopcana. The construction of UTE Coopcana began in 2012 in the city of São Carlos do Ivaí, in the state of Paraná, and operations started on August 28, 2013. The total Installed Capacity of UTE Coopcana is of 50 MW and Assured Energy is 157.7 GWh. This project has an associated PPA in force until 2033 with CPFL Brasil.

Solar Power Plant

Tanquinho. The Tanquinho Solar Power Plant, in the state of São Paulo, started operations in November 2012, with total Installed Capacity of 1.1 MWp. We expect Tanquinho to generate 1.6 GWh per year.

Wind Farms

Wind power is derived from the force of the wind passing over the blades of a wind turbine and causing the turbine to spin. The amount of mechanical power that is transferred and the potential of electricity to be produced are directly related to the density of the air, the area covered by the blades of the wind turbine and the wind speed and height of each wind turbine.

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The construction of a wind farm is less complex than the construction of Small Hydroelectric Power Plants, consisting of the preparation of the foundation and installation of wind turbines, which are assembled on site by suppliers. The construction period of a wind farm is shorter than that of a Small Hydroelectric Power Plant, ranging from 18 months to two years, on average. The investment per installed MW for the construction of a wind farm is proportionally lower than the investment for construction of a Small Hydroelectric Power Plant. In contrast, the operation may be more complex and there are more risks associated with the variability of winds, especially in Brazil, where there is little history of wind measurement.

Certain regions of Brazil are more favorable in terms of wind speed, with higher average speeds and lower volatility as measured by speed variation, allowing for more predictability in the volume of wind energy to be produced. Wind farms operate complementary to hydroelectric plants, since wind speed is usually higher in drought periods and it is, therefore, possible to preserve water from reservoirs in scarce rain periods. The complementary operation of wind farms and Small Hydroelectric Power Plants should allow us to “stock up” on electric power in the Small Hydroelectric Power Plants’ reservoirs during periods of high wind power generation. Estimates of Brazilian Wind Power Association (*ABEEólica – Associação Brasileira de Energia Eólica*) indicate a wind energy potential of 500 GW in Brazil, a volume that greatly exceeds the country’s current total Installed Capacity of 13.6 GW as of December 2018 according to ANEEL, signaling a high growth potential in this segment. Wind farms are also eligible for MDL and have the potential to generate carbon credits for sale.

We currently have 45 wind farms under the authorization regime, located in the states of Ceará, Rio Grande do Norte and Rio Grande do Sul.

Atlântica Complex. The Atlântica complex consists of the Atlântica I, II, IV and V Wind Farms. The complex has an aggregate Installed Capacity of 120 MW and aggregate Assured Energy of 461.7 GWh. The electricity from these wind farms has been sold through an alternative energy auction held in 2010, or the 2010 Alternative Sources Auction, with CCEARs in force until 2033. The Atlântica complex commenced operations in March 2014.

Bons Ventos. Bons Ventos Wind Farm, in the state of Ceará, has an Installed Capacity of 50 MW and an associated agreement with Eletrobras under the Proinfa Program to sell all of the energy generated for a period of 20 years. The acquisition of Bons Ventos Wind Farm was concluded in June 2012.

Campo dos Ventos II Wind Farm. In 2010, CPFL Geração acquired Campo dos Ventos II Wind Farm (CPFL Renováveis currently holds this investment) in the cities of João Câmara and Parazinho, in the state of Rio Grande do Norte, which began operations in September 2013. This wind farm has an Installed Capacity of 30 MW and Assured Energy of 131.4 GWh. The electricity from Campo dos Ventos II has been sold through an auction held in 2010, with PPAs in force until August 2033.

Canoa Quebrada. Canoa Quebrada Wind Farm, in the state of Ceará, has an Installed Capacity of 57 MW and an associated agreement with Eletrobras under the Proinfa Program to sell all of the energy generated for a period of 20 years. The acquisition of Canoa Quebrada Wind Farm was concluded in June 2012.

Enacel. Enacel Wind Farm, in the state of Ceará, has an Installed Capacity of 31.5 MW and an associated agreement with Eletrobras under the Proinfa Program to sell all of the energy generated for a period of 20 years. The acquisition of Enacel Wind Farm was concluded in June 2012.

Eurus Complex. Eurus complex consists of the Eurus I and Eurus III Wind Farms. The complex has an aggregate Installed Capacity of 60 MW and aggregate Assured Energy of 31.6 MWavg. The Eurus complex sold its energy through the 2010 Reserve Energy Auction.

Foz do Rio Choró. Foz do Rio Choró Wind Farm, in the state of Ceará, began operations in January 2009. It has an Installed Capacity of 25.2 MW and an associated agreement with Eletrobras under the Proinfa Program to sell all of the energy generated for a period of 20 years. The PPA is in force until June 2029.

Icaraizinho. Icaraizinho Wind Farm, in the state of Ceará, began operations in October 2009. It has an Installed Capacity of 54.6 MW and an associated agreement with Eletrobras under the Proinfa Program to sell all of the energy generated for a period of 20 years. The PPA is in force until October 2029.

Macacos Complex. The Macacos complex consists of the Pedra Preta, Costa Branca, Juremas and Macacos Wind Farms. The complex has an aggregate Installed Capacity of 78.2 MW and aggregate Assured Energy of 37.5 MWavg. The Macacos complex sold its energy through the 2010 Alternative Sources Auction.

Morro dos Ventos Complex. The Morro dos Ventos complex consists of the Morro dos Ventos I, Morro dos Ventos III, Morro dos Ventos IV, Morro dos Ventos VI and Morro dos Ventos IX Wind Farms. The complex has an aggregate Installed Capacity of 145 MW and aggregate Assured Energy of 68.6 MWavg. The Morro dos Ventos complex sold its energy through the 2009 Reserve Energy Auction.

Morro dos Ventos II. Morro dos Ventos II wind farm, in the state of Rio Grande do Norte, has an Installed Capacity of 29.2 MW and aggregate Assured Energy of 15.4 MWavg. This wind farm commenced operations in April 2015.

Paracuru. Paracuru Wind Farm, in the state of Ceará, began operations in November 29, 2008. It has an Installed Capacity of 25.2 MW and an associated PPA in force until November 2028.

Pedra Cheirosa. The Pedra Cheirosa complex, located in the state of Ceará, consists of the Pedra Cheirosa I and Pedra Cheirosa II Wind Farms, which have an aggregate Installed Capacity of 48.3 MW and aggregate Assured Energy of 27.5 MWavg. This wind farm commenced operations in June 2017.

Praia Formosa. Praia Formosa Wind Farm, in the state of Ceará, began operations in August 2009. It has an Installed Capacity of 105 MW and an associated agreement with Eletrobras under the Proinfa Program to sell all of the energy generated for a period of 20 years. The PPA is in force until August 2029.

Rosa dos Ventos Wind Farm. In June 2013, CPFL Renováveis acquired Rosa dos Ventos Wind Farm (Canoa Quebrada and Lagoa do Mato fields), located in the state of Ceará. This wind farm has an Installed Capacity of 13.7 MW and the electricity produced by Rosa dos Ventos is subject to an agreement with Eletrobras under the Proinfa Program.

Santa Clara Complex. Santa Clara complex, in the state of Rio Grande do Norte, comprises seven wind farms with an Installed Capacity of 188 MW and an associated CCEAR in force until June 2032. The Santa Clara wind farms sold their energy through the 2009 Reserve Energy Auction.

São Benedito and Campo dos Ventos Complexes. The São Benedito complex consists of the Ventos de São Benedito, Ventos de Santo Dimas, Santa Mônica, São Domingos, Ventos do São Martinho and Santa Úrsula wind farms. The São Domingos and Ventos de São Martinho Wind Farms, previously part of the Campo dos Ventos complex, were allocated to the São Benedito complex in order to increase synergies. The Campo dos Ventos complex consists of Campo dos Ventos I, III and V Wind Farms. Together, they have an Installed Capacity of 231 MW.

Taíba Albatroz. Taíba Albatroz Wind Farm, in the state of Ceará, has an Installed Capacity of 16.5 MW and an associated agreement with Eletrobras under the Proinfa Program to sell all of the energy generated for a period of 20 years. The acquisition of Taíba Albatroz Wind Farm was concluded in June 2012.

The following table sets forth certain information relating to our principal renewable facilities, held by CPFL Renováveis (51.56% our share) in operation as of December 31, 2018:

Capacity (MW)		Assured Energy (GWh)		Placed in service	Facility upgraded	Concession expires
Our share	TOTAL	Our share	TOTAL			

Small Hydroelectric plants:

<i>Alto Irani</i>	10.8	21.0	55.8	108.3	2008		2032
<i>Americana</i>	15.5	30.0	26.6	51.5	1949	2001	2027
<i>Andorinhas</i>	0.3	0.5	1.9	3.7	1941		(2)
<i>Arvoredo</i>	6.7	13.0	33.3	64.6	2010		2032
<i>Barra da Paciência</i>	11.9	23.0	67.2	130.4	2011		2029
<i>Boa Vista 2</i>	15.4	29.9	70.2	136.1	2018		2055
<i>Buritis</i>	0.4	0.8	1.6	3.1	1922	2016	2027 ⁽¹⁾
<i>Capão Preto</i>	2.2	4.3	9.8	19.0	1911	2007	2027
<i>Chibarro</i>	1.3	2.6	6.9	13.4	1912	2007	2027
<i>Cocais Grande</i>	5.2	10.0	20.8	40.4	2009		2029
<i>Corrente Grande</i>	7.2	14.0	38.5	74.7	2011		2030
<i>Diamante</i>	2.2	4.2	7.2	14.0	2005		2019
<i>Dourados</i>	5.6	10.8	25.7	49.8	1926	2013	2027
<i>Eloy Chaves</i>	9.7	19.0	49.7	96.4	1954	2013	2027
<i>Esmeril</i>	2.6	5.0	13.0	25.2	1912	2015	2027
<i>Figueiropolis</i>	10.0	19.4	56.9	110.4	2010		2034
<i>Gavião Peixoto</i>	2.5	4.8	16.4	31.8	1913	2007	2027
<i>Guaporé</i>	0.4	0.7	1.8	3.5	1950		(2)
<i>Jaguari</i>	6.1	11.8	20.3	39.4	1917	2001	2027
<i>Lençóis</i>	0.9	1.7	4.7	9.1	1917	2001	2027
<i>Ludesa</i>	15.5	30.0	95.7	185.7	2007		2032
<i>Mata Velha</i>	12.4	24.0	59.2	114.8	2016		
<i>Monjolinho</i>	0.3	0.6	0.5	1.0	1893	2003	2027 ⁽²⁾
<i>Ninho da Águia</i>	5.2	10.0	29.3	56.9	2011		2029
<i>Novo Horizonte</i>	11.9	23.0	47.0	91.1	2011		2032
<i>Paiol</i>	10.3	20.0	47.3	91.7	2010		2032
<i>Pinhal</i>	3.5	6.8	16.7	32.4	1928	2014	2027
<i>Pirapó</i>	0.4	0.8	2.6	5.1	1952		(2)
<i>Plano Alto</i>	8.2	16.0	41.8	81.0	2008		2032
<i>Saltinho</i>	0.4	0.8	3.3	6.4	1950		(2)
<i>Salto Góes</i>	10.3	20.0	50.1	97.2	2012		2040
<i>Salto Grande</i>	2.4	4.6	11.7	22.6	1912	2002	2027
<i>Santa Luzia</i>	14.7	28.5	83.2	161.4	2011		2037
<i>Santana</i>	2.2	4.3	11.8	22.9	1951	2015	2027
<i>São Gonçalo</i>	5.7	11.0	32.6	63.2	2010		2030
<i>São Joaquim</i>	4.2	8.1	22.9	44.4	1911	2014	2027
<i>Socorro</i>	0.5	1.0	1.4	2.7	1909	2001	2027 ⁽¹⁾
<i>Três Saltos</i>	0.3	0.6	2.0	3.8	1928	2018	2027 ⁽¹⁾
<i>Varginha</i>	4.6	9.0	24.3	47.2	2010		2029
<i>Várzea Alegre</i>	3.9	7.5	22.0	42.7	2011		2029
SUBTOTAL – Small Hydroelectric Power Plants (our share)	234	453	1,134	2,199			

Biomass Thermoelectric Power Plants:

<i>Baldin (CPFL Bioenergia)</i>	23.2	45.0	23.5	45.6	2010		2039
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<i>Bio Alvorada</i>	25.8	50.0	68.7	133.2	2013	2042
<i>Bio Buriti</i>	25.8	50.0	48.7	94.4	2011	2040
<i>Bio Coopcana</i>	25.8	50.0	81.3	157.7	2013	2042
<i>Bio Ester</i>	20.6	40.0	65.5	127.0	2010	2029
<i>Bio Formosa</i>	20.6	40.0	18.0	35.0	2011	2032
<i>Bio Ipê</i>	12.9	25.0	19.5	37.8	2012	2040
<i>Bio Pedra</i>	36.1	70.0	108.0	209.4	2012	2046
SUBTOTAL – Biomass						
Thermoelectric Power Plants (our share)	191	370	433	840		
Wind farm plants						
Atlântica I	15.5	30.0	59.2	114.8	2014	2046
Atlântica II	15.5	30.0	58.3	113.0	2014	2046
Atlântica IV	15.5	30.0	58.7	113.9	2014	2046
Atlântica V	15.5	30.0	61.9	120.0	2014	2046
Bons Ventos	25.8	50.0	73.6	142.8	2010	2033
Campo dos Ventos I	13.0	25.2	61.4	119.1	2016	2046
Campo dos Ventos II	15.5	30.0	67.7	131.4	2013	2046
Campo dos Ventos III	13.0	25.2	60.5	117.4	2016	2046
Campo dos Ventos V	13.0	25.2	59.2	114.8	2016	2046
Canoa Quebrada	29.4	57.0	108.8	211.1	2010	2032
Canoa Quebrada (Rosa dos Ventos)	5.4	10.5	15.0	29.0	2014	2032
Costa Branca	10.7	20.7	44.2	85.8	2014	2046
Enacel	16.2	31.5	46.2	89.6	2010	2032
Eurus I	15.5	30.0	70.0	135.8	2014	2046
Eurus III	15.5	30.0	72.7	141.0	2014	2046
Eurus VI	4.1	8.0	14.4	28.0	2011	2045
Foz do Rio Choró	13.0	25.2	33.4	64.8	2009	2032
Icaraizinho	28.2	54.6	99.8	193.6	2009	2032
Juremas	8.3	16.1	34.3	66.6	2014	2046
Lagoa do Mato	1.6	3.2	6.4	12.5	2014	2032
Macacos	10.7	20.7	44.2	85.8	2014	2046
Morro dos Ventos I	14.8	28.8	61.4	119.1	2014	2045
Morro dos Ventos III	14.8	28.8	62.8	121.9	2014	2045
Morro dos Ventos IV	14.8	28.8	62.1	120.4	2014	2045
Morro dos Ventos VI	14.8	28.8	59.2	114.8	2014	2045
Morro dos Ventos IX	15.5	30.0	64.7	125.4	2014	2045
Morro dos Ventos II	15.0	29.2	69.6	134.9	2015	2047
Paracuru	13.0	25.2	56.5	109.5	2008	2032
Pedra Cheirosa	24.9	48.3	124.2	240.9	2017	2049
Pedra Preta	10.7	20.7	46.5	90.2	2014	2046
Praia Formosa	54.1	105.0	130.1	252.3	2009	2032
Santa Clara I	15.5	30.0	61.9	120.0	2011	2045
Santa Clara II	15.5	30.0	57.8	112.1	2011	2045
Santa Clara III	15.5	30.0	56.5	109.5	2011	2045
Santa Clara IV	15.5	30.0	55.5	107.7	2011	2045
Santa Clara V	15.5	30.0	56.0	108.6	2011	2045

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Santa Clara VI	15.5	30.0	55.7	108.0	2011	2045
São Domingos	13.0	25.2	(3)	(3)	2016	2032
Taiba	8.5	16.5	30.4	59.0	2008	2032
Ventos de São Benedito	15.2	29.4	(3)	(3)	2016	2032
Ventos de Santo Dimas	15.2	29.4	(3)	(3)	2016	2032
Ventos de São Martinho	7.6	14.7	(3)	(3)	2016	2032
Ventos de Santa Mônica	15.2	29.4	(3)	(3)	2016	2032
Ventos de Santa Úrsula	14.1	27.3	(3)	(3)	2016	2032
SUBTOTAL – Wind farms (our share)	675	1,309	2,261	4,385		
Solar Power Plant						
Tanquinho	0.6	1.1	0.9	1.8	2012	-
SUBTOTAL – Solar Power Plant (our share)	0.6	1.1	0.9	1.8		
TOTAL (our share only)	1,100	2,133	3,829	7,426		

(1) Hydroelectric projects with installed capacity equal to or less than 1,000 kW that have a concession contract. The legislation for SHPPs with installed capacity less than 5,000 kW has changed and currently only a Registration is required. The concession contracts are valid until the concession expires.

(2) Hydroelectric projects with installed capacity equal to or less than 5,000 kW that are registered with the regulatory authority and the administrator of power concessions but do not require concession or authorization processes for operating.

(3) Projects that have no Assured Energy figure as they do not operate in the regulated market.

Expansion of Installed Capacity

Consumption of electricity in Brazil increased 1.1% in 2018, reaching 472,242 GWh, as was expected by the EPE. To address this increase in demand and to improve our margins, we continue to expand our Installed Capacity in renewable generation.

Plants under development	Estimated Installed Capacity (MW)	Estimated Assured Energy (GWh/yr)	Start of Construction	Expected Start of Operations	Our Ownership (%)	Estimated Installed Capacity Available to us (MW)	Estimated Assured Energy Available to us (GWh/yr)
Cherobim Small Hydro Power Plant(one company)	28	145.2	-	2024	51.56	14.4	126.40
Gameleira Wind Complex	69.3	345.1	-	2024	51.56	35.7	313.00

SHPP Lucia Cherobim. SHPP Lucia Cherobim is located in the state of Paraná and is expected to commence operations in 2024. It is expected to have an aggregate Installed Capacity of 28 MW and aggregate Assured Energy of 145.2 GWh/year. In the A-6/2018 Energy Auction, SHPP Lucia Cherobim sold 16.5 MW_{avg} at R\$189.95/MWh (base August 2018), with annual adjustments by the IPCA index to the auction ceiling price of R\$290.00/MWh. For more information on the A-6/2018 Auction, see “Item 4. Information on the Company—Overview.”

Gameleira Wind Complex. Gameleira wind complex is located in the state of Rio Grande do Norte and is expected to commence operations in 2024. It is expected to have an aggregate Installed Capacity of 69.3 MW and aggregate Assured Energy of 345.1 GWh/year. In the A-6/2018 Energy Auction, the Gameleira wind complex sold 12.0 MW_{avg} of the energy to be generated by it at R\$89.89/MWh (base August 2018), with annual adjustments by the IPCA index to the auction ceiling price of R\$227.00/MWh. Additionally, the Gameleira wind complex sold its remaining energy in the Free Market. For more information on the A-6/2018 Auction, see “Item 4. Information on the Company—Overview.”

Energy Commercialization

We carry out electricity commercialization activities mainly through our subsidiary CPFL Brasil. The key areas of this activity are:

- procuring electricity for commercialization activities by entering into bilateral contracts with energy companies (including our generation subsidiaries and third parties) and purchasing electricity in public auctions;
- reselling electricity to Free Consumers;
- reselling electricity to distribution companies (including CPFL Paulista, CPFL Piratininga and RGE) and other agents in the electricity market through bilateral contracts; and
- providing agency services to Free Consumers and power generators before the CCEE and other agents, such as guidance on their operational requirements.

As a retailer trade company CPFL Brasil is also responsible for the energy load of Free and Special Consumers, centralizing the management of contracts and the relationship with the CCEE. Companies do not need to be CCEE members, which simplifies the process. The focus of CPFL Brasil’s activities in retail market are potentially Free Consumers, such as retail chains, banks, supermarkets, universities, among others.

The rates at which CPFL Brasil purchases and sells electricity in the Free Market are determined by bilateral negotiations with its suppliers and consumers.

Services

Through CPFL Serviços, CPFL Atende, CPFL Total, CPFL Eficiência, Nect, and Authi, we offer our consumers a wide range of electricity-related services. These services are designed to help consumers improve the efficiency, cost and reliability of the electric equipment they use. Our main electricity-related services include:

- **Transmission networks:** CPFL Serviços offers energy solutions in transmission assets of up to 138 kV, plans and drafts the civil, electrical and electromechanical projects, carries out material and equipment logistics, constructs transmission lines and Substations and, additionally, carries out the preventive and corrective maintenance of these assets afterwards in consideration of each consumer’s needs and growth expectations and in accordance with rigorous safety criteria, aiming for an optimal use of resources.

- **Distribution Networks:** CPFL Serviços plans, constructs and performs maintenance on electric energy distribution system networks of up to 34.5 kV, including above and underground electricity grids, medium-voltage Substations and transformers and lighting solutions. It has significant experience in the market and familiarity with the various technical standards applicable in different regions of Brazil. As a result, it is able to bring quality and technologically-advanced energy solutions.

- **Self-production networks and energy-efficiency programs:** The self-production networks, formerly offered by CPFL Serviços, consist of electric energy production alternatives. They ensure supply of energy to consumers, diversify inputs and reduce costs. It offers diesel and natural gas generators that operate mainly as a back-up energy source, and in peak periods, which reduce our customers' electricity costs. Its natural gas co-generation activities include the simultaneous and sequential production of electricity and heat using a single fuel type. It also offers solutions in acclimatization and energy-efficiency projects as well as distributed generation of solar energy. After October 2014, all self-production activities were transferred to CPFL Eficiência, adding self-production to its services portfolio, which also includes services relating to cooling, cogeneration, motive power and lighting for the creation of customized solutions, promoting savings, sustainability and power security.

CPFL Eficiência also offers distributed generation services, through CPFL GD S.A., a source of generation that injects power directly into the local distribution grid. This kind of generation reduces the use of the transmission system and requires less generation of centralized power plants, benefiting the consumer and the electricity sector as a whole. One such service is our solar photovoltaic systems (solar panels), which are offered through our Envo business line (created in 2017 to broaden the scope of services we offer and its activities are directed at residential and small-sized commercial customers), that enable customers to generate their own energy. The solar panels generate power whenever exposed to light, even on cloudy days. The power that is generated is injected into the grid and recorded as a credit by the energy distributor, which is then automatically discounted in the customer's conventional electricity bill. The activities of our Envo business line expand to the entire state of São Paulo, including cities that are not within our concession area.

- **Equipment recovery:** CPFL Serviços has experience in refurbishing electric equipment of up to 25 kV in order to restore their efficiency. Its familiarity with equipment for refurbishment also allows it to produce distribution transformers. In addition, it produces and fabricates measurement panels as well as panels for protection and command networks.
- **CPFL Atende:** CPFL Atende is a contact center and customer relationship company, created to provide services both for companies within our group and for other companies. Among these services are face-to-face service, back office services, credit recovery, toll free customer support, ombudsman services, service desks and sales.
- **CPFL Total:** CPFL Total provides the "Serviço em Conta," which enables us to charge business customers for additional products and services through their electricity bills. Operations related to collections and onlending company offering bill payment services were discontinued as of 2016.
- **Nect:** Nect provides administrative services such as human resources, materials purchasing and logistics, maintenance and administrative infrastructure for the companies within our group. Nect aims to standardize processes and achieve productivity gains.
- **Authi:** Authi provides IT services, information technology maintenance, services related to system updates, program development and customization and computer and peripheral equipment maintenance services.

Competition

We face competition from other generation and commercialization companies in the sale of electricity to Free Consumers. Distribution and transmission companies are required to permit the use of their lines and ancillary facilities for the distribution and transmission of electricity by other parties upon payment of a tariff.

Brazilian law and our concession agreements provide that all of our distribution and hydroelectric concessions or authorizations can be renewed once with approval from the MME or ANEEL as the granting authority, provided that the concessionaire so requests and that certain requirements related to the rendering of public services or hydropower exploitation are met. See "Item 3. Key Information—Risk Factors—We are uncertain as to the renewal of our concessions and authorizations" for more information. We intend to apply for the extension of each concession upon its expiration.

We may face significant competition from third parties in bidding for renewal of such concessions or for any new concessions. The Brazilian government has absolute discretion over whether to renew existing concessions, and the acquisition of certain concessions by competing investors could adversely affect our results of operations. Furthermore, there can be no assurance as to whether the renewal of a certain concession will be granted on the same grounds as the current relevant concession.

In addition, under applicable legislation, other distributors cannot distribute energy in our concession area. As such, customers located in the respective region can only acquire energy from us, with the exception of consumers who become Free Consumers, who can acquire energy directly in the Free Market.

Our Concessions and Authorizations

Hydroelectric generation projects in Brazil are subject to three types of contractual framework, depending on their generation capacity:

- Pursuant to Law No. 9,074/1995 (as amended by Law No. 13,360/2016), only hydroelectric generation projects with a capacity greater than 50,000 kW are now implemented through concessions granted by ANEEL following a public bidding process (which leads to the execution of a concession agreement). Requests to renew these concessions are examined by ANEEL on a case-by-case basis, according to the terms of the agreement, the public bidding note and regulations applicable at the time of the request for renewal. ANEEL has the power to deny a request to extend a concession period.
- Hydroelectric Power Plants with capacity greater than 5,000 kW but equal to or lower than 50,000 kW now only require regulatory authorization from ANEEL, as opposed to a concession. Authorizations are renewable at the discretion of ANEEL on a case-by-case basis. ANEEL must provide justification for its decisions and any renewal must foster the public interest.
- Hydroelectric Power Plants with capacity equal to or less than 5,000 kW only require registration with ANEEL rather than a concession agreement or an authorization.

Other generation projects such as wind farms, solar and Thermoelectric Power Plants are implemented through an authorization from ANEEL, without a public bid or concession. The only exceptions are Thermoelectric Power Plants with a capacity greater than 50,000 kW and which have been designated as a service in the public interest: these projects are also subject to public bidding and concession procedures, similar to hydroelectric projects with a capacity greater than 50,000 kW mentioned above.

See “—Concessions and Authorizations—Concessions” for more information about concessions and authorizations.

Concessions

We operate under concessions granted by the Brazilian government through ANEEL for our generation, transmission and distribution businesses. We have the following concessions with respect to our distribution and transmission business:

Concession no.	Concessionaire	State	Term
014/1997	CPFL Paulista	São Paulo	30 years from November 1997
09/2002	CPFL Piratininga	São Paulo	30 years from October 1998
012/1997	RGE Sul	Rio Grande do Sul	30 years from November 1997
013/1997	RGE ⁽²⁾	Rio Grande do Sul	30 years from November 1997
021/1999	CPFL Santa Cruz ⁽¹⁾	São Paulo and Paraná	30 years from July 2015
015/1999	CPFL Jaguari ⁽¹⁾	São Paulo	30 years from July 2015
017/1999	CPFL Mococa ⁽¹⁾	São Paulo and Minas Gerais	30 years from July 2015
018/1999	CPFL Leste Paulista ⁽¹⁾	São Paulo	30 years from July 2015
019/1999	CPFL Sul Paulista ⁽¹⁾	São Paulo	30 years from July 2015
003/2013	CPFL Piracicaba	São Paulo	30 years from February 2013
006/2015	CPFL Morro Agudo	São Paulo	30 years from March 2015
020/2018	CPFL Maracanaú	Ceará	30 years from September 2018

(1) CPFL Santa Cruz, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista merged into CPFL Santa Cruz (formerly CPFL Jaguari) effective as of January 1, 2018. See “Item 4. Information on the Company—Overview” and Note 12.5.2 of our audited annual consolidated financial statements for more information.

(2) RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019. See “Item 4. Information on the Company—Overview” and Note 12.5.1 of our audited annual consolidated financial statements for more information.

Law No. 12,783/13 of 2013 provided that the type of existing distribution concession held by our four distribution subsidiaries that have now been merged into CPFL Santa Cruz could be renewed, subject to certain conditions, for a further term of up to 30 years. Accordingly, we applied for renewal of these concessions in 2014, and on November 9, 2015 the MME issued a decision extending the concessions to July 2045. The extension agreements were signed on December 9, 2015. Since the extensions were granted under current laws and regulations regarding distribution concessions, the concessions are now subject to the current targets and standards set by the Brazilian authorities.

On November 21, 2017, through the Resolution for Authorization No. 6,723/2017, ANEEL approved our proposal to consolidate the concessions of five of our distribution companies (CPFL Santa Cruz; Companhia Leste Paulista de Energia; Companhia Sul Paulista de Energia; Companhia Luz e Força de Mococa; and CPFL Jaguari, together the Merged Companies), pursuant to Normative Resolution No. 716/2016. Effective as of January 1, 2018, the Merged Companies were merged with and into a company named CPFL Santa Cruz (which company was previously named CPFL Jaguari). This transaction was approved by Extraordinary General Meetings held on December 31, 2017 at each of the Merged Companies. See Note 12.5.2 of our audited annual consolidated financial statements for more information.

According to Normative Resolution No. 716/2016, until the first tariff review of the Merged Companies in March 2021, ANEEL may institute a policy that reconciles the variations in the old tariffs for each of the Merged Companies and the new unified tariff for CPFL Santa Cruz over time. ANEEL decided to introduce the unified tariff during the March 2018 tariff adjustment. The tables below summarize our generation business concessions. In addition to these concessions, CPFL Centrais Geradoras, as an Independent Power Producer with generating capacity of less than 5,000 kW, operates under a regulatory registration rather than a concession agreement.

On December 4, 2018, through the Resolution for Authorization No. 7,499/2018, ANEEL approved our proposal to consolidate the concessions of our two distribution companies (RGE and RGE Sul), pursuant to Normative Resolution No. 716/2016, amended by Normative Resolution No. 835/2018. RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019.

As a result of this merger transaction and the related transfer of the assets of RGE to RGE Sul, RGE no longer exists. See “Item 4. Information on the Company—Overview” and Note 12.5.1 of our audited annual consolidated financial statements for more information.

Conventional generation

Concession no.	Independent Power Producers / Concessionaire	Plant	State	Term	Maximum renewal period
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Concessions

Hydroelectric plants

005/2004	CPFL Geração	Serra da Mesa 14 de Julho, Castro Alves and Monte Claro	Goiás	35 years from November 2004	(1)
008/2001	CERAN		Rio Grande do Sul	35 years from March 2001	At the discretion of ANEEL
036/2001	Barra Grande	Barra Grande	Rio Grande do Sul	35 years from May 2001	At the discretion of ANEEL
043/2000	ENERCAN	Campos Novos	Santa Catarina	35 years from May 2000	At the discretion of ANEEL
005/1997	Investco	Luiz Eduardo Magalhães	Tocantins Santa Catarina and Rio Grande do Sul	35 years from December 1997	At the discretion of ANEEL
128/2001	Foz do Chapecó	Foz do Chapecó		35 years from November 2001	At the discretion of ANEEL

Thermoelectric plants

015/1997	CPFL Geração	UTE Carioba	São Paulo	30 years from November 1997	30 years
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Small Hydroelectric Plants

015/1997	CPFL Geração	Cariobinha (Small Hydroelectric Power Plant)	São Paulo	30 years from November 1997	30 years
(3)	CPFL Centrais Geradoras ⁽⁴⁾	Lavrinha (Micro Hydroelectric Power Plant)	São Paulo	(3)	-
009/1999	CPFL Geração ⁽⁵⁾	Macaco Branco (Small Hydroelectric Power Plant)	São Paulo	30 years (from December 2012)	(2)
(3)	CPFL Centrais Geradoras ⁽⁴⁾	Pinheirinho (Micro Hydroelectric Power Plant)	São Paulo	(3)	-
010/1999	CPFL Geração ⁽⁵⁾	Rio do Peixe I and II (Small Hydroelectric Power Plants)	São Paulo	30 years (from December 2012)	(2)
(3)	CPFL Centrais Geradoras ⁽⁴⁾	Santa Alice (Micro Hydroelectric Power Plant)	São Paulo	(3)	-
(3)			São Paulo	(3)	-

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	CPFL Centrais Geradoras ⁽⁴⁾	São José (Micro Hydroelectric Power Plant)			
		São Sebastião (Micro Hydroelectric Power Plant)			
(3)	CPFL Centrais Geradoras ⁽⁴⁾	Turvinho (Micro Hydroelectric Power Plant)	São Paulo	(3)	-
(3)	CPFL Centrais Geradoras ⁽⁴⁾	Hydroelectric Power Plant)	São Paulo	(3)	-

Renewable generation

Small Hydroelectric Plants	Concession no.	Independent Power Producers / Concessionaire	Plant	State	Term	Maximum renewal period
	003/2011 Dispatch No. 1990 ⁽⁶⁾	Jayaditya CPFL Sul Centrais	Americana Andorinhas	São Paulo Rio Grande do Sul	up to November 2027 (3)	30 years (3)
	002/2011	Chimay	Buritis	São Paulo	up to November 2027	(3)
	002/2011	Chimay	Capão Preto	São Paulo	up to November 2027	(3)
	002/2011	Chimay	Chibarro	São Paulo	up to November 2027	(3)
	002/2011	Chimay	Dourados	São Paulo	up to November 2027	30 years
	004/2011	Mohini	Eloy Chaves	São Paulo	up to November 2027	30 years
	002/2011	Chimay	Esmeril	São Paulo	up to November 2027	30 years
	002/2011 Dispatch No. 1,987/2005 ⁽⁶⁾	Chimay CPFL Sul Centrais	Gavião Peixoto Guaporé	São Paulo Rio Grande do Sul	up to November 2027 undertermined up to November 2027	(3) -
	004/2011	Mohini	Jaguari	São Paulo	up to November 2027	30 years
	002/2011	Chimay	Lençóis	São Paulo	up to November 2027	(3)
	004/2011	Mohini	Monjolinho	São Paulo	up to November 2027	(3)
	004/2011 Dispatch No. 1989 ⁽⁶⁾	Mohini CPFL Sul Centrais	Pinhal Pirapó	São Paulo Rio Grande do Sul	up to November 2027 (3)	30 years (3)
	Dispatch No. 1988 ⁽⁶⁾	CPFL Sul Centrais	Saltinho	Rio Grande do Sul	(3) up to November 2027	(3)
	003/2011 002/2011	Jayaditya Chimay	Salto Grande São Joaquim	São Paulo São Paulo	up to November 2027	(3) 30 years

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				up to November 2027	
004/2011	Mohini	Socorro	São Paulo	up to November 2027	(3)
003/2011	Jayaditya	Santana	São Paulo	up to November 2027	(3)
003//2011	Jayaditya	Três Saltos	São Paulo	up to November 2027	(3)

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(1) We have the contractual right to 51.54% of the Assured Energy of this facility under a 30-year agreement, expiring in 2028. The concession for Serra da Mesa, held by Furnas, has been extended to September 30, 2040. The renewal was approved by the MME in Ordinance No. 262 published on April 27, 2012 and the final extension of the renegotiated GSF was approved by ANEEL in Authoritative Resolution No. 6,055 published on September 27, 2016.

(2) Hydroelectric projects with an Installed Capacity greater than 5,000 kW that were granted through a concession process with the regulatory authority and the administrator of power concessions, prior to changes made by Law No. 13,360/2016. Pursuant to Law No. 13,360/2016, only Hydroelectric Power Plants with capacity greater than 50,000 kW now require a concession; those with capacity of more than 5,000 kW up to 50,000 kW are subject to an authorization from ANEEL; and those with capacity equal to or less than 5,000 kW only require registration with ANEEL rather than a concession or authorization.

(3) Hydroelectric projects with an Installed Capacity equal to or less than 5,000 kW that are registered with the regulatory authority and the administrator of power concessions, but do not require concession or authorization processes for operating.

(4) Since August 29, 2013 CPFL Centrais Geradoras has held the unbundled generation activities of the Macaco Branco and SHPPs Rio do Peixe I and II, as required by Resolution No. 521/12 for their renewal, together with the generation activities of the Santa Alice, Lavrinha, São José, Turvinho, Pinheirinho and São Sebastião Micro Hydroelectric Power Plants. Since November 17, 2016, due to changes made by Law No. 13,360/2016, hydroelectric projects with an Installed Capacity equal to or less than 5,000 kW no longer require concession or authorization processes for operating, but only registration with ANEEL.

(5) The Macaco Branco and Rio do Peixe concessions were transferred from CPFL Centrais Geradoras to CPFL Geração in September 30, 2015 (see “–Overview”).

(6) Hydroelectric Power Plants with capacity equal to or less than 5,000 kW only require registration with ANEEL. These Hydroelectric Power Plants have already received these registrations and are exempt from concession and authorization requirements.

Authorizations

Conventional generation

	Authorization no.	Independent Power Producers / Concessionaire	Plant	State	Term	Maximum renewal period
Thermoelectric plants	2277	EPASA	Termoparaíba Thermoelectric Power Plant	Paraíba	35 years from December 7, 2007	At the discretion of MME
	2277	EPASA	Termonordeste Thermoelectric Power Plant	Paraíba	35 years from December 12, 2007	At the discretion of MME

Renewable generation

Small Hydroelectric plants	Authorization	Independent Power Producers /	Plant	State	Term	Maximum renewal period
	no.	Concessionaire				
	Resolution No. 587	SPE Alto Irani Energia S.A.	Alto Irani	Santa Catarina	30 years from October 30, 2002	30 years
	Resolution No. 606	SPE Arvoredo Energia S.A.	Arvoredo	Santa Catarina	30 years from November 7, 2002	30 years
	Resolution No. 348	SPE Barra da Paciência Energia S.A.	Barra da Paciência	Minas Gerais	30 years from December 20, 1999	30 years
	Resolution No. 349	SPE Cocais Grande Energia S.A.	Cocais Grande	Minas Gerais	30 years from December 23, 1999	30 years
	Resolution No. 17	SPE Corrente Grande Energia S.A.	Corrente Grande	Minas Gerais	30 years from January 17, 2000	30 years
	Resolution No. 198	Figueirópolis Energética S.A.	Figueirópolis	Mato Grosso	30 years from May 04, 2004	30 years
	Resolution No. 705	Ludesa Energética S.A.	Ludesa	Santa Catarina	30 years from december 17, 2002	30 years
	Resolution No. 262	Mata Velha Energética S.A.	Mata Velha	Minas Gerais	30 years from May 16, 2002	30 years
	Resolution No. 370	SPE Ninho da Águia Energia S.A.	Ninho da Águia	Minas Gerais	30 years from December 30, 1999	30 years
	Resolution No. 652	Novo Horizonte Energética S.A.	Novo Horizonte	Paraná	30 years from november 26, 2002	30 years
	Resolution No. 406	SPE Paiol Energia S.A.	Paiol	Minas Gerais	30 years from August 07, 2002	30 years
	Resolution No. 607	SPE Plano Alto Energia S.A.	Plano Alto	Santa Catarina	30 years from November 7, 2002	30 years
	Resolution No. 2510	SPE Salto Góes Energia S.A.	Salto Góes	Santa Catarina	30 years from August 19, 2010	30 years
	Resolution No. 13	SPE São Gonçalo Energia	São Gonçalo	Minas Gerais	30 years from January 14,	30 years

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	S.A.			2000	
Ordinance No. 352	SPE Santa Luzia Energética S.A.	Santa Luzia	Santa Catarina	35 years from December 21, 2007	30 years
Resolution No. 355	SPE Varginha Energia S.A.	Varginha	Minas Gerais	30 years from December 23, 1999	30 years
Resolution No. 367	SPE Várzea Alegre Energia S.A.	Várzea Alegre	Minas Gerais	30 years from December 30, 1999	30 years
Ordinance No. 502	SPE Boa Vista II Energia S.A.	Boa Vista 2	Minas Gerais	35 years from November 09, 2015	30 years
Ordinance No. 475	CPFL Sul Centrais	Diamante	Mato Grosso	30 years from November 13, 1997	(1)

(1) Hydroelectric projects with an Installed Capacity equal to or less than 5,000 kW that are registered with the regulatory authority and the administrator of power concessions at the time of renewal and do not require concession or authorization processes for operating.

**Biomass
Thermoelectric
Power Plants**

Resolution No.2106	CPFL Bioenergia	Baldin Thermoelectric Power Plant	São Paulo	30 years from September 24, 2009	At the discretion of the granting authority
Resolution No. 3714	SPE Alvorada S.A.	Alvorada Thermoelectric Power Plant	Minas Gerais	30 years from October 29, 2012	At the discretion of the granting authority
Resolution No. 2643	CPFL Bio Buriti S.A.	Buriti Thermoelectric Power Plant	São Paulo Paraná	30 years from December 16, 2010	At the discretion of the granting authority

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Resolution No. 3328	SPE Coopcana S.A.	Coopcana Thermoelectric Power Plant		30 years from February 14, 2012	At the discretion of the granting authority
Resolution No. 117	CPFL Bio Ester Ltda.	Ester Thermoelectric Power Plant	São Paulo	30 years from May 21, 1999	At the discretion of the granting authority
Resolution No. 259	CPFL Bio Formosa S.A.	Baía Formosa Thermoelectric Power Plant	Rio Grande do Norte	30 years from May 15, 2002	At the discretion of the granting authority
Resolution No. 2375	CPFL Bio Ipê S.A.	Ipê Thermoelectric Power Plant	São Paulo	30 years from May 3, 2010	At the discretion of the granting authority
Ordinance No. 129	CPFL Bio Pedra S.A.	Pedra Thermoelectric Power Plant	São Paulo	35 years from February 28, 2011	At the discretion of the granting authority

Wind farm plants

Ordinance No. 134	Atlântica I Parque Eólico S.A.	Atlântica I	Rio Grande do Sul	35 years from February 28, 2011	At the discretion of the granting authority
Ordinance No. 148	Atlântica II Parque Eólico S.A.	Atlântica II	Rio Grande do Sul	35 years from March 04, 2011	At the discretion of the granting authority
Ordinance No. 147	Atlântica IV Parque Eólico S.A.	Atlântica IV	Rio Grande do Sul	35 years from March 04, 2011	At the discretion of the granting authority
Ordinance No. 168	Atlântica V Parque Eólico S.A.	Atlântica V	Rio Grande do Sul	35 years from March 22, 2011	At the discretion of the granting authority
Resolution No. 093	Bons Ventos Geradora de Energia S.A. Campo dos Ventos II	Bons Ventos	Ceará	30 years from March 10, 2003	At the discretion of the granting authority
Ordinance No. 257	Energias Renováveis S.A. Campo dos Ventos I	Campo dos Ventos II	Rio Grande do Norte	35 years from April 18, 2011	At the discretion of the granting authority
Resolution No. 3967	Energias Renováveis S.A. Campo dos Ventos III	Campo dos Ventos I	Rio Grande do Norte	30 years from March 26, 2013	At the discretion of the granting authority
Resolution No. 3968	Energias Renováveis S.A. Campo dos Ventos V	Campo dos Ventos III	Rio Grande do Norte	30 years from March 26, 2013	At the discretion of the granting authority
Resolution No. 3969	Energias Renováveis S.A.	Campo dos Ventos V	Rio Grande do Norte	30 years from March 26, 2013	At the discretion of the granting authority
Resolution No. 680	BVP Geradora de Energia S.A. Rosa dos Ventos Geração e	Canoa Quebrada	Ceará	30 years from December 11, 2002	At the discretion of the granting authority
Resolution No. 329	Comercialização de Energia S.A.	Canoa Quebrada	Ceará	30 years from June 19, 2002	At the discretion of the granting authority

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Ordinance No. 585	SPE Costa Branca Energia S.A.	Costa Branca	Rio Grande do Norte	35 years from October 14, 2011	At the discretion of the granting authority
Resolution No. 625	BVP Geradora de Energia S.A.	Enacel	Ceará	30 years from November 13, 2002	At the discretion of the granting authority
Ordinance No. 264	Desa Eurus I S.A.	Eurus I	Rio Grande do Norte	35 years from April 19, 2011	At the discretion of the granting authority
Ordinance No. 266	Desa Eurus III S.A.	Eurus III	Rio Grande do Norte	35 years from April 27, 2011	At the discretion of the granting authority
Ordinance No. 749	Eurus VI Energias Renováveis Ltda. SIIF Cinco Geração e	Eurus VI	Rio Grande do Norte	35 years from August 25, 2010	At the discretion of the granting authority
Resolution No. 306	Comercialização de Energia S.A. Eólica Icaraizinho Geração e	Foz de Choró	Ceará	30 years from June 05, 2002	At the discretion of the granting authority
Resolution No. 454	Comercialização de Energia S.A.	Icaraizinho	Ceará	30 years from August 28, 2002	At the discretion of the granting authority

Ordinance No. 556	SPE Juremas Energia S.A. Rosa dos Ventos Geração e Comercialização de Energia S.A.	Juremas	Rio Grande do Norte	35 years from September 29, 2011	At the discretion of the granting authority
Resolution No. 340	Comercialização de Energia S.A.	Lagoa do Mato	Ceará	30 years from June 26, 2002	At the discretion of the granting authority
Ordinance No. 557	Macacos Energia S.A.	Macacos	Rio Grande do Norte	35 years from September 29, 2011	At the discretion of the granting authority
Ordinance No. 664	Desa Morro dos Ventos I S.A.	Morro dos Ventos I	Rio Grande do Norte	35 years from July 27, 2010	At the discretion of the granting authority
Ordinance No. 373	Desa Morro dos Ventos II S.A.	Morro dos Ventos II	Rio Grande do Norte	35 years from June 12, 2012	At the discretion of the granting authority
Ordinance No. 685	Desa Morro dos Ventos III S.A.	Morro dos Ventos III	Rio Grande do Norte	35 years from August 04, 2010	At the discretion of the granting authority
Ordinance No. 686	Desa Morro dos Ventos IV S.A.	Morro dos Ventos IV	Rio Grande do Norte	35 years from August 04, 2010	At the discretion of the granting authority
Ordinance No. 663	Desa Morro dos Ventos VI S.A.	Morro dos Ventos VI	Rio Grande do Norte	35 years from July 27, 2010	At the discretion of the granting authority
Ordinance No. 665	Desa Morro dos Ventos IX S.A. Eólica Paracuru Geração e Comercialização de Energia S.A.	Morro dos Ventos IX	Rio Grande do Norte	35 years from July 27, 2010	At the discretion of the granting authority
Resolution No. 460	Comercialização de Energia S.A.	Paracuru	Ceará	30 years from August 28, 2002	At the discretion of the granting authority
Ordinance No. 584	Pedra Preta Energia S.A. Eólica Formosa Geração e Comercialização de Energia S.A.	Pedra Preta	Rio Grande do Norte	35 years from October 14, 2011	At the discretion of the granting authority
Resolution No. 307	Comercialização de Energia S.A. Santa Clara I	Praia Formosa	Ceará	30 years from June 05, 2002	At the discretion of the granting authority
Ordinance No. 609	Energia Renováveis Ltda. Santa Clara II	Santa Clara I	Rio Grande do Norte	35 years from July 02, 2010	At the discretion of the granting authority
Ordinance No. 683	Energia Renováveis Ltda.	Santa Clara II Santa Clara III	Rio Grande do Norte	35 years from August 05, 2010	At the discretion of the granting authority

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Ordinance No. 610	Santa Clara III Energia Renováveis Ltda. Santa Clara IV		Rio Grande do Norte	35 years from July 02, 2010	At the discretion of the granting authority
Ordinance No. 672	Energia Renováveis Ltda. Santa Clara IV Santa Clara V		Rio Grande do Norte	35 years from July 30, 2010	At the discretion of the granting authority
Ordinance No. 838	Energia Renováveis Ltda. Santa Clara V Santa Clara VI		Rio Grande do Norte	35 years from October 11, 2010	At the discretion of the granting authority
Ordinance No. 670	Energia Renováveis Ltda. Santa Clara VI Santa Mônica		Rio Grande do Norte	35 years from July 30, 2010	At the discretion of the granting authority
Resolution No. 4592	Energias Renovaveis Ltda. Santa Ursula	Santa Mônica	Rio Grande do Norte	30 years from April 01, 2014	At the discretion of the granting authority
Resolution No. 4591	Energias Renovaveis Ltda. São Domingos	Santa Úrsula	Rio Grande do Norte	30 years from March 31, 2014	At the discretion of the granting authority
Resolution No. 5074	Energias Renováveis S.A.	São Domingos	Rio Grande do Norte	30 years from March 10, 2015	At the discretion of the granting authority
Resolution No. 778	BVP Geradora de Energia S.A. São Benedito	Taíba Albatroz	Ceará	30 years from December 24, 2002	At the discretion of the granting authority
Resolution No. 4563	Energias Renovaveis Ltda. Ventos de Santo Ventos de Santo	Ventos de São Benedito	Rio Grande do Norte	30 years from March 07, 2014	At the discretion of the granting authority
Resolution No. 4562	Dimas Energias Renovaveis Ltda. Ventos de São Martinho	Ventos de Santo Dimas	Rio Grande do Norte	30 years from March 07, 2014	At the discretion of the granting authority
Resolution No. 4572	Energias Renovaveis Ltda.	Ventos de São Martinho	Rio Grande do Norte	30 years from March 21, 2014	At the discretion of the granting authority
Ordinance No. 387	Pedra Cheirosa I Energia S.A.	Pedra Cheirosa I	Ceará	35 years from August 04, 2014	At the discretion of the granting authority
Ordinance No. 359	Pedra Cheirosa II Energia S.A.	Pedra Cheirosa II	Ceará	35 years from July 23, 2014	At the discretion of the granting authority
Solar Power Plants	Of. ANEEL No. 961/2012	SPE CPFL Solar 1 Energia S.A.	Tanquinho São Paulo	Undetermined(*)	Undetermined(*)

(*) Power plant with reduced capacity, exempted from granting authority, requiring only registration with the granting authority (ANEEL).

Independent Power Producers and Self-Generators

A generation company classified as an Independent Power Producer under Brazilian law receives a concession or authorization to produce energy for sale to local distribution companies, Free Consumers and other types of consumers (excluding Captive Consumers).

A generation company classified as a self-generator under Brazilian law receives a concession or authorization to produce energy for its own consumption. A self-generator may, upon specific authorization by ANEEL, sell or trade any excess energy it is unable to consume.

The prices that Independent Power Producers and self-generators may charge for the sale of energy to certain types of consumers are subject to tariffs established by ANEEL, whereas the sale price to other types of consumers can be freely negotiated between the parties. See “—Authorizations” for more information.

Concessionaires

A company classified as a concessionaire under Brazilian law receives a concession to distribute, transmit or generate electric energy. Since concessions involve public services or assets, they can only be granted through a public bidding procedure (*licitação pública*). Most of the tariffs charged by concessionaires of public services are determined by ANEEL. Concessionaires are not free to negotiate these rates with consumers, except for (i) generation concessionaires, which are free to establish these rates, as long as their concessions have not been extended pursuant to Law No. 12,783/13, in which case ANEEL determines the tariff that must be applied and (ii) distribution concessionaires that may grant discounts to consumers (as long as equal treatment is granted to other consumers within the same category).

The concession agreement and related documents establish the concession period and whether the related concession can be extended. For concessions to generate electric energy, the amortization period for the related investment is up to 35 years, renewable once for a maximum period of 20 years, according to Law No. 9,074/95 or for a maximum period of up to 30 years, if the concession period extension is subject to Law No. 12,783/13.

Although concession agreements and applicable laws generally allow for the extension of the concession period, such extension is not automatic. The decision to extend a concession agreement is subject to compliance by the concessionaire with certain requirements and the discretion of the granting authority, which must provide justification for its decision, and the decision must foster the public interest.

Properties

Our principal properties consist of hydroelectric generation plants. We have accounted for our distribution companies' fixed assets, comprised mainly of Substations and distribution networks, partially as intangible assets and partially as financial assets of concession. The net book value of our total property, plant and equipment as of December 31, 2018 was R\$9,457 million. No single one of our properties produces more than 10.0% of our total revenues. Our facilities are generally adequate for our present needs and suitable for their intended purposes. Pursuant to Brazilian law, the essential properties and facilities that we use in performing our obligations under our concession agreements cannot be transferred, assigned, pledged or sold to, or encumbered by, any of our creditors without prior approval from ANEEL.

Environmental

The Brazilian Federal constitution gives both the Brazilian federal and state governments the power to enact laws designed to protect the environment. A similar power is given to municipalities whose local interests may be affected. Municipal laws are considered to be a supplement to federal and state laws. A violator of applicable environmental laws may be subject to administrative and criminal sanctions, and will have an obligation to remediate and/or provide compensation for environmental damages. Administrative sanctions may include substantial fines and suspension of activities, while criminal sanctions may include fines and, for individuals (including executive officers and employees of companies who commit environmental crimes), imprisonment.

Our energy distribution, transmission and generation facilities are subject to environmental laws and licensing procedures, which include the undertaking of environmental impact studies prior to constructing new facilities and implementing programs to reduce environmental impacts. Once the respective environmental licenses are obtained, the company holding such license remains subject to compliance with specific requirements.

The environmental issues regarding the construction of new electricity generation facilities require specifically tailored oversight. For this reason, CPFL Geração manages these matters in order to ensure that its policies and environmental obligations are given adequate consideration. Decisions are made by environmental committees, whose members include representatives of each project partner and of each plant's environmental management office. Our environmental committees are constantly interacting with government agencies to ensure environmental compliance and future electricity generation. In addition, we support local community programs that relocate rural families in collective resettlements and provide institutional support for families involved in the conservation of local biodiversity.

In order to ensure compliance with environmental laws, we have implemented an internal management system that complies with best environmental practices in all of our segments. We have established a process to identify, evaluate and update matters relating to applicable environmental laws, as well as other requirements applicable to our environmental management system. Additionally, our generation, transmission and distribution operating segments are subject to internal audits to ensure they are in compliance with our internal environmental policies, as well as external audits that verify whether our activities are in compliance with ISO 14001. Our environmental management processes consider our budgets and realistic forecasts and always aim to achieve improvements at the financial, social and environmental levels.

The Brazilian Power Industry

According to ANEEL, as of December 31, 2018, the Installed Capacity of power generation in Brazil was 162,932 MW. Historically, 65% of the total Installed Capacity in Brazil has derived from Hydroelectric Power Plants. Large

Hydroelectric Power Plants tend to be far from the consumption centers. This requires construction of large transmission lines at High Voltage and extra-high voltage (230 kV to 750 kV) that often cross the territory of several states. Brazil has a robust electric grid system, with more than 133,000 km of transmission lines with voltage equal to or greater than 230 kV and processing capacity of over 325,000 MVA from the state of Rio Grande do Sul through the state of Amazonas.

According to the EPE, electricity consumption in Brazil increased by 1.1% in 2018, reaching 472,242 GWh. However, the MME and the EPE estimate that electricity consumption will grow by 3.0% per year until 2027. According to the ten-year expansion plan published by the MME and the EPE in order to satisfy this expected growth in demand, Brazil's Installed Capacity is expected to reach 216.3 GW by 2027, of which 112.4 GW (51.9%) is projected to be hydroelectric, 32.0 GW (14.8%) is projected to be thermoelectric and nuclear and 51.9GW (24.0%) is projected to be from other renewable sources.

Currently, 30.2% of the Installed Capacity in Brazil is owned by Eletrobras, a publicly traded corporation controlled by the Brazilian government. We are a relevant player within the electricity generation sector, with 2% of the market share.

Principal Regulatory Authorities

Ministry of Mines and Energy — MME

The MME is the Brazilian government's primary authority in the power industry. Following the adoption of the New Regulatory Framework in 2004, the Brazilian government, acting primarily through the MME, has assumed certain duties that were previously the responsibility of ANEEL, including drafting guidelines for the granting of concessions and issuing directives governing the tender process for concessions that relate to public services and public assets.

National Energy Policy Council — CNPE

The CNPE, a committee created in August 1997, advises the President of Brazil on the development of national energy policy. The CNPE is chaired by the Minister of Mines and Energy and consists of eight government ministers, three members selected by the President of Brazil, another representative of the MME and the president of the EPE. The CNPE was created to optimize the use of Brazil's energy resources and to guarantee national energy supply.

Brazilian Electricity Regulatory Agency — ANEEL

ANEEL is an independent federal regulatory agency whose primary responsibility is to regulate and supervise the power industry in accordance with policies set forth by the MME, together with other matters delegated to it by the Brazilian government and the MME. ANEEL's current responsibilities include, among others: (i) administering concessions for electric energy generation, transmission and distribution, including the approval of electricity tariffs; (ii) enacting regulations for the electric energy industry; (iii) implementing and regulating the exploitation of energy sources, including the use of hydroelectric power; (iv) promoting the public tender process for new concessions; (v) settling administrative disputes among electricity generation entities and electricity purchasers; and (vi) defining the criteria and methodology for the determination of Transmission Tariffs.

National Electrical System Operator — ONS

The ONS is a nonprofit organization that coordinates and controls the production and transmission of energy by electric utilities engaged in generation, transmission and distribution activities. The primary role of the ONS is to oversee generation and transmission operations in the Interconnected Power System, subject to regulation and supervision by ANEEL. Objectives and principal responsibilities of the ONS include: (i) operational planning for the generation industry; (ii) organizing the use of the domestic national grid and international interconnections; (iii) guaranteeing that all parties in the industry have access to the transmission network in a non-discriminatory manner; (iv) assisting in the expansion of the electric energy system; (v) proposing plans to the MME for expansions of the Basic Network; and (vi) submitting rules for the operation of the transmission system for ANEEL's approval.

Electric Energy Trading Chamber — CCEE

The CCEE is a nonprofit organization that is subject to authorization, inspection and regulation by ANEEL. The CCEE replaced the Wholesale Energy Market. The CCEE is responsible, among other things, for (i) registering all CCEARs and all agreements that result from market adjustments and the volume of electricity contracted in the Free Market, (ii) accounting for and clearing of short-term transactions, and (iii) managing and operating the CDE Account, the RGR Fund and the CCC Account. The CCEE consists of entities that hold concessions, permissions or

authorizations within the electricity industry and Free and Special Consumers. Its board of directors is composed of four members appointed by these parties, together with one appointed by the MME. The member appointed by the MME also acts as Chairman of the Board of Directors.

Energy Research Company — EPE

On August 16, 2004, the Brazilian government created the EPE, a state-owned company responsible for conducting strategic research on the energy industry, including with respect to electric energy, oil, gas, coal and renewable energy sources. The research carried out by EPE is used by MME in its policymaking role in the energy industry.

Energy Industry Monitoring Committee — CMSE

The New Regulatory Framework created the Energy Industry Monitoring Committee (*Comitê de Monitoramento do Setor Elétrico*), or CMSE, which acts under the direction of the MME. The CMSE is responsible for monitoring supply conditions within the system and for indicating steps to be taken to correct problems.

Concessions and Authorizations

The Brazilian Federal constitution provides that the development, use and sale of electric energy may be undertaken directly by the Brazilian government or indirectly through the granting of concessions, permissions or authorizations. Historically, the Brazilian electric energy industry has been dominated by generation, transmission and distribution concessionaires controlled by the federal or state governments.

Companies or consortia that wish to build or operate facilities for generation, transmission or distribution of electricity in Brazil must apply to the MME or to ANEEL, as representatives of the Brazilian government, for a concession, permission or authorization, as the case may be. Concessions and permissions are granted through more complex proceedings or through public tender, whilst authorizations are granted through more simple administrative proceedings or through public auctions for power purchase and sale.

Concessions

Concessions grant rights to generate, transmit or distribute electricity in the relevant concession area for a specified period (as opposed to permissions and authorizations, which may be revoked at any time at the discretion of the MME, in consultation with ANEEL). This period is usually 35 years for new generation concessions, and 30 years for new transmission or distribution concessions. An existing concession may be renewed at the granting authority's discretion and subject to compliance by the concessionaire with certain requirements.

The Concession Law establishes, among other things, the conditions that the concessionaire must comply with when providing electricity services, the rights of consumers, and the obligations of the concessionaire and the granting authority. Furthermore, the concessionaire must comply with regulations governing the electricity sector. The main provisions of the Concession Law are summarized below:

Adequate service. The concessionaire must render adequate service with respect to regularity, continuity, efficiency, safety and accessibility.

Use of land. The concessionaire may use public land or request the granting authority to expropriate necessary private land for the benefit of the concessionaire. In such case, the concessionaire must compensate the affected private landowners.

Strict liability. The concessionaire is strictly liable for all damages arising from the provision of its services.

Changes in controlling interest. The granting authority must approve any direct or indirect change in controlling interests in the concessionaire.

Intervention by the granting authority. Pursuant to Law No. 12,767 of December 27, 2012, as modified by Law No. 12,839 of July 2013, the granting authority may intervene in the concession, acting through ANEEL, to ensure the adequate performance of services, as well as full compliance with applicable contractual and regulatory provisions. Within 30 days after the date of the decree, ANEEL is required to commence an administrative proceeding in which the concessionaire is entitled to contest the intervention. During the term of the administrative proceeding, a government appointed manager becomes responsible for carrying on the concession. The administrative proceeding must be completed within one year (which may be extended for two more years). In order for the intervention to cease and the concession to return to the concessionaire, the concessionaire's shareholders are required to present a detailed recovery plan to ANEEL and correct the irregularities identified by ANEEL.

Termination of the concession. The termination of the concession agreement may be accelerated by means of expropriation and/or forfeiture. Expropriation is the early termination of a concession for reasons related to the public interest that must be expressly declared by law. Forfeiture must be declared by the granting authority after ANEEL or the MME has made a final administrative ruling that the concessionaire, among other things, (i) has failed to render adequate service or to comply with applicable law or regulation, (ii) no longer has the technical, financial or economic capacity to provide adequate service, or (iii) has not complied with penalties assessed by the granting authority. The concessionaire may contest any expropriation or forfeiture in the courts. The concessionaire is entitled to indemnification for its investments in expropriated assets that have not been fully amortized or depreciated, after deduction of any fines and damages due by the concessionaire. However, the timeline for receiving the indemnification is not defined by law. Additionally, on December 10, 2014, our distribution companies signed a concession contract amendment that guarantees, at the concession period termination, that the company will receive or pay the balance of the remaining amounts under billed sector financial assets or liabilities.

Expiration. When the concession expires, all assets, rights and privileges that are materially related to the rendering of the electricity services revert to the Brazilian government. Following the expiration, the concessionaire is entitled to indemnification for its investments in assets that have not been fully amortized or depreciated as of the expiration. However, the timeline for receiving the indemnification is not defined by law.

Renewal. Law No. 12,783 of January 11, 2013 specified the conditions for the renewal of generation, transmission and distribution concessions obtained under Articles 17, 19 or 22 of Law No. 9,074 of July 7, 1995. Under Law No. 12,783/13, these concessions may be extended once, at the discretion of the Brazilian government, for up to 30 years, in order to ensure the continuity and efficiency of the services rendered and low tariffs. In addition, Law No. 12,783/13 enabled holders of concessions that were due to expire in 2015, 2016 and 2017 to apply for early renewal, subject to certain conditions. Renewal of generation concessions is contingent on the satisfaction of the following conditions: (i) tariffs calculated by ANEEL for each hydroelectric plan; (ii) allocation of energy quotas to distribution companies in the National Interconnected System; and (iii) submission to the standards of service quality set by ANEEL. For renewal, the assets remaining unamortized at the renewal date would be indemnified and the indemnification payment would not be considered to be annual revenue. The remuneration relating to new assets or existing assets that were not indemnified would be considered annual revenue. Resolution No. 521/12 published by ANEEL on December 14, 2012 established that if generation concessions operated by distribution companies are renewed under Law No. 12,783/13, the generation concession must be managed by an entity that is independent from the distribution company within twelve months after the renewal date. Law No. 12,783/13 also extinguished two sector charges, the CCC Account and the RGR Fund (see “—Regulatory Charges—RGR Fund and UBP” and “—Regulatory Charges—CDE Account”). Additionally, Law No. 13,360/2016 enabled holders of concessions of hydropower plants with up to 50 MW of Installed Capacity that have not yet been renewed to apply for 30-year renewals, subject to making a contribution for UBP, as set by the granting authority, and to paying a CFURH fee for the use of water to the municipality where such use occurs. See, “—Regulatory Charges—Fee for the Use of Water – CFURH” and “—Regulatory Charges—RGR Fund and UBP.”

In the specific case of distribution concessions, in 2015 the Brazilian government enacted Decree No. 8,461/2015 establishing new standards that concessionaires must achieve, mainly regarding quality, management and price. Within five years after the renewal date, the concessionaire must meet these standards and achieve annual targets. If the annual targets are not achieved, the concessionaire’s controlling shareholders may be required to make further capital expenditures. In addition, if the concessionaire fails to meet the annual targets for two consecutive years, or fails to meet any of the required standards at the end of the five-year term, the concession may be terminated or corporate control of the concessionaire may be transferred (see “—Risk Factors—We are uncertain as to the renewal of our concessions and authorizations”).

Penalties. ANEEL regulations govern the imposition of sanctions against the participants in the electricity sector and classify the appropriate penalties based on the nature and severity of the breach (including warnings, fines and forfeiture). For each breach, the fines can be up to 2.0% of the annual revenue (net of value-added tax and services tax) of the concessionaire or, if the concession in default is non-operative, up to 2.0% of the estimated value of energy that would be produced by the concessionaire in the 12-month period prior to the issuance of the infraction notice related to the breach. Infractions that may result in fines relate to the failure of the concessionaire to request ANEEL's approval in the following cases, among others: (i) execution of contracts between related parties in the cases provided by regulation; (ii) sale or assignment of the assets related to services rendered as well as the imposition of any encumbrance (including any security, bond, guarantee, pledge and mortgage) on them or any other assets related to the concession or the revenues of the electricity services; and (iii) changes in the controlling interests in the holder of the concession. In cases of contracts executed between related parties that are submitted for ANEEL's approval, ANEEL may seek to impose restrictions on the terms and conditions of these contracts and, in extreme circumstances, determine that the contract be rescinded. See "Item 3. Key Information—Risk Factors—We may not be able to comply with the terms of our concession agreements and authorizations, which could result in fines, other penalties and, depending on the gravity of the non-compliance, in our concessions or authorizations being terminated" for more information.

Authorizations

Authorizations are unilateral and discretionary acts carried out by the granting authority. Unlike concessions, authorizations generally do not require public tender. As an exception to the general rule, authorizations may also be granted to potential power producers after specific auction processes for the purchase of power conducted by ANEEL.

In the power generation sector, Independent Power Producers and self-generators hold an authorization as opposed to a concession. Independent Power Producers and self-generators do not receive public service concessions or permits to render public services. Rather, they are granted authorizations or specific concessions to explore water resources that merely allow them to produce, use or sell electric energy. Each authorization granted to an Independent Power Producer or self-generators sets forth the rights and duties of the authorized company. Authorized companies have the right to ask ANEEL to carry out expropriations on their behalf, and to their benefit, are subject to ANEEL's supervision and prior approval in the event of a change in their controlling interests. Moreover, early unilateral termination of the authorization entitles the authorized company to seek compensation from the granting authority for damages suffered. Authorizations have a term of up to 35 years, and can be renewed, at the discretion of the granting authority, for up to 20 years, pursuant to Law No. 9,074/1995.

An Independent Power Producer may sell part or all of its output to customers on its own account and at its own risk. A self-generator may, upon specific authorization by ANEEL, sell or trade any excess energy it is unable to consume. Independent Power Producers and self-generators are not granted monopoly rights and are not subject to price controls, with the exception of specific cases. Independent Power Producers compete with public utilities and among themselves for large customers, pools of customers of distribution companies or any customers not served by a public utility. Independent Power Producers and concessionaire companies are subject to a series of penalties for the failure to comply with provisions of the authorizations. The following penalties may be applied: (i) warning notices; (ii) fines per breach of up to 2.0% of the annual revenues generated by the relevant authorization, or, if the relevant authorization is non-operational, up to 2.0% of the estimated value of the energy that would have been produced for the 12 months prior to the infraction notice related to the breach; (iii) injunctions related to construction activities; (iv) restrictions on the operation of existing facilities and equipment; (v) temporary suspension from participating in new tenders, which may also be extended to controlling shareholders of the entity subject to the penalty; (vi) intervention; or (vii) termination of the authorization.

Permissions

Permissions have a very limited use within the Brazilian electricity sector. Permissions are granted to rural power generation cooperatives that supply power to their members and occasionally to consumers that are not part of the cooperative, in areas not regularly served by large Distributors. Permissions are not a material portion of the Brazilian power matrix.

The New Regulatory Framework

Since 1995, the Brazilian government has taken a number of measures to reform the Brazilian electric energy sector. These culminated, on March 15, 2004, in the enactment of the New Regulatory Framework, which further restructured the power industry with the ultimate goal of providing consumers with a secure electricity supply at an adequate tariff.

The New Regulatory Framework introduced material changes to the regulation of the power industry, with the intention to (i) provide incentives to private and public entities to build and maintain generation capacity and (ii) assure the supply of electricity within Brazil at adequate tariffs through competitive public electricity auction processes. The key features of the New Regulatory Framework include:

- Creation of two “environments” for the trading of electricity, including: (i) the Regulated Market, a more stable market in terms of supply of electricity; and (ii) a market specifically addressed to certain participants (*i.e.*, Free Consumers and commercialization companies), called the Free Market, that permits a certain degree of competition.
- Restrictions on certain activities of Distributors, so as to require them to focus on their core business of distribution, to promote more efficient and reliable services to Captive Consumers.
- Elimination of self-dealing, in order to provide an incentive to Distributors to purchase electricity at the lowest available prices rather than buying electricity from related parties.
- Maintenance of contracts entered into prior to the New Regulatory Framework, in order to provide regulatory stability for transactions carried out before its enactment.

The New Regulatory Framework excludes Eletrobras and its subsidiaries from the National Privatization Program, which is a program originally created by the Brazilian government in 1990 to promote the process of privatization of state-owned companies.

Regulations under the New Regulatory Framework include, among other items, rules relating to auction procedures, the form of PPAs and the method of passing costs through to Final Consumers. Under these regulations, all parties that purchase electricity must contract all of their electricity demand under the guidelines of the New Regulatory Framework. Parties that sell electricity must have “ballast” for their sales (*i.e.*, the amount of energy sold in CCEE must be previously purchased under PPAs and/or generated by the seller’s own power plants). Agents that do not comply with such requirements are subject to penalties imposed by ANEEL and CCEE.

Beginning in 2005, all electricity generation, distribution and transmission companies, Independent Power Producers and Free and Special Consumers are required to notify the MME, by August 1 of each year, of their estimated electricity demand or estimated electricity generation, as the case may be, for each of the subsequent five years. Each distribution company is required to notify the MME, within the 60-day period preceding each electricity auction, of the amounts of electricity that it intends to contract in the auction. Based on this information, the MME must establish the total amount of energy to be contracted in the Regulated Market and the list of generation projects that will be allowed to participate in the auctions.

Environments for the Trading of Electric Energy

Under the New Regulatory Framework, electricity purchase and sale transactions are carried out in two different segments: (i) the Regulated Market, which contemplates the purchase by distribution companies through public auctions of all electricity necessary to supply their consumers, and (ii) the Free Market, which contemplates the purchase of electricity by non-regulated entities (such as Free Consumers and energy traders).

Electricity distribution companies fulfill their electricity supply obligations primarily through public auctions. Distribution companies may also purchase electricity outside the public auction process from: (i) generation companies that are connected directly to such distribution company, except for hydro generation companies with capacity higher than 30 MW, certain thermo-generation companies and affiliated generation companies; (ii) electricity generation projects participating in the initial phase of the Proinfa Program, a program designed to diversify Brazil’s energy sources; (iii) the Itaipu Power Plant; (iv) auctions administered by the distribution companies, if the market that they supply is no greater than 500 GWh/year; and (v) Hydroelectric Power Plants whose concessions have been

renewed by the government under Law No. 12,783/13 (in this latter case, in “energy quotas” distributed among the distribution companies by the Brazilian government, at prices determined by MME/ANEEL). The electricity generated by Itaipu continues to be sold by Eletrobras to the distribution concessionaires operating in the South/Southeast/Midwest Interconnected Power System, although no specific contract was entered into by these concessionaires. The rates at which the electricity generated by Itaipu is traded are denominated in U.S. dollars and established pursuant to a treaty between Brazil and Paraguay. As a consequence, Itaipu rates rise or fall in accordance with the variation of the U.S. dollar/*real* exchange rate. Changes in the price of electricity generated by Itaipu are, however, subject to the Parcel A Cost recovery mechanism discussed below under “—Basis for Calculation of Distribution Tariffs.” Furthermore, electricity distributors are also allowed to sell surplus energy to Free and Special Consumers, generators and self-generators by means of the Surplus Selling Mechanism, established by ANEEL’s Normative Resolution No. 824/2018. The Surplus Selling Mechanism is set to take place periodically several times per year through 12-month, 6-month and 3-month agreements, with settlement at the equilibrium price set for each submarket and energy type. See, “—Distribution—Purchases of Electricity.”

The Regulated Market

In the Regulated Market, distribution companies purchase their expected electricity requirements for their Captive Consumers from generators through public auctions. The auctions are administered by MME and ANEEL, either directly or indirectly through the CCEE.

Electricity purchases are made through two types of bilateral agreements: (i) Energy Agreements (*Contratos de Quantidade de Energia*); and (ii) Capacity Agreements (*Contratos de Disponibilidade de Energia*). Under an Energy Agreement, a generator commits to supply a certain amount of electricity and assumes the risk that its electricity supply could be adversely affected by hydrological conditions and low reservoir levels, among other conditions, which could interrupt the supply of electricity. In such cases, the generator is required to purchase the electricity elsewhere in order to comply with its supply commitments. Under a Capacity Agreement, a generator commits to make a certain amount of capacity available to the Regulated Market. In such case, the generator's revenue is guaranteed and the distributors must bear the risk of a supply shortage. Together, these agreements comprise the CCEARs.

According to the New Regulatory Framework, within certain limits (as explained below), electricity distribution entities are entitled to pass through to their respective consumers the cost of electricity they purchase through public auction as well as any taxes and industry charges.

With respect to the granting of new concessions, the regulations require bids for new Hydroelectric Power Plants to include, among other things, a minimum percentage of electricity to be supplied to the Regulated Market.

The Free Market

The Free Market covers transactions between generation concessionaires, Independent Power Producers, self-generators, energy traders, importers of electric energy, Free Consumers and Special Consumers. The Free Market can also include existing bilateral contracts between generators and distributors until they expire. Upon expiration, such contracts must be executed under the New Regulatory Framework guidelines. However, generators generally sell their generation simultaneously, sharing the total amount of energy between the Regulated and Free Markets. It is possible to sell energy separately in one or more markets.

Free Consumers are divided into two types: Conventional Free Consumers and Special Free Consumers:

- Conventional Free Consumers are those whose contracted energy demand is at least 2.5 MW. This limit was lowered by MME Ordinance No. 514/2018 and will be 2.5 MW as of July 1, 2019 and 2.0 MW as of January 1, 2020. These consumers may opt to purchase conventional energy, entirely or partially, from another authorized selling agent under the terms of current legislation. We refer to consumers who have exercised this option as "Conventional Free Consumers."
- Special Free Consumers are individual or groups of consumers whose contracted energy demand is between 500 kW and 3 MW. We refer to consumers who have exercised this option as "Special Free Consumers." Special Free Consumers may only purchase energy from renewable sources: (i) Small Hydroelectric Power Plants with capacity superior to 5,000 kW and equal or inferior to 30,000 kW, (ii) hydroelectric generators with capacity superior to 5,000 kW and equal or inferior to 50,000 kW, under the independent power production regime; (iii) generators with capacity limited to 3,000 kW, and (iv) alternative energy generators (solar, wind and biomass enterprises) with system capacity not greater than 50,000 kW. State-owned generators may sell electricity to Free Consumers; however, unlike private generators, they may only do so through an auction process.

We also refer to consumers who meet the relevant demand requirement but have not exercised the option to migrate to the free market as “Potential Conventional Free Consumers” or “Potential Special Free Consumers,” as the case may be, and in general as “Potential Free Consumers.”

Recent Developments in the Free Market

On August 2, 2012, the MME enacted Act No. 455, providing for new rules regarding the registration of PPAs in the Free Market. Under Act No. 455/2012, PPAs had to be registered in advance with the CCEE on a monthly basis, but the electricity volume contracted could be adjusted on an *ex post* basis after the consumption had taken place. Under Act No. 455/2012, as of June 1, 2014, PPAs needed to be registered with the CCEE in advance on a weekly basis, the price had to be disclosed and the *ex post* volume adjustment was prohibited. As a result, parties had to state their expected consumption volume *ex ante*, except when they had specifically indicated to the CCEE that the PPA in question referred to effective consumption volume. However, ABRACEEL obtained an injunction against Act No. 455/2012, preventing the implementation of the *ex ante* contract registration rule to energy traders. The application of this act in the CCEE was previously suspended for all agents (generators, traders and Free Consumers), since its applicability to specific groups of agents was unclear. In addition, on January 9, 2018, a federal court declared Act No. 455/2012 null, stating that the MME has no competence to issue regulations related to the commercialization of electric energy. On July 4, 2018, the MME published Ordinance No. 269/2018 revoking Ordinance No. 455/2012 in view of the court settlement reached in the proceeding with ABRACEEL.

On December 28, 2018, the MME issued the Ordinance No. 514/2018, which lowers the requirements for being a Free Consumer of conventional energy, dropping the minimum contracted energy demand from 3.0 MW to 2.5 MW, effective as of July 1, 2019, and from 2.5 MW to 2.0 MW, effective as of January 1, 2020. Prior to Ordinance No. 514/2018, Free Consumers with contracted energy demands between 0.5 MW and 3.0 MW could only purchase power from special sources (small hydro, solar, wind and biomass sources).

Auctions on the Regulated Market

Pursuant to Decree No. 9,143/2017, electricity auctions for new generation projects in process are held as A-“n” auctions, where “n” means the number of years before the initial delivery date and currently ranges from three to seven (referred to as “A-3,” “A-4,” “A-5,” “A-6” and “A-7” auctions). Electricity auctions from existing power generation facilities take place (i) from one to five years before the initial delivery date (referred to as “A-1,” “A-2,” “A-3,” “A-4” and “A-5” auctions) or (ii) approximately four months before the delivery date (referred to as “market adjustments”). Traditionally, “A-3” and “A-5” auctions have been launched for new generation projects and “A-1” auctions for existing generation facilities. Auction bid announcements are prepared by ANEEL in compliance with guidelines established by the MME, which include a requirement to use the lowest energy price as the criterion to determine the winner of the auction.

Each generation company that participates in an auction executes a contract for purchase and sale of electricity with each distribution company, the CCEAR, in proportion to the distribution companies’ respective estimated demand for electricity and price established in the auction. The only exception to these rules refers to the market adjustment auction, in which the contracts are executed directly between generation and distribution companies and are limited to a two-year term. The total amount of energy contracted in such market adjustment auctions may not exceed 5.0% of the total amount of energy contracted by each Distributor. The CCEAR contains standard, non-negotiable terms and conditions which are established by ANEEL. A significant portion of our CCEARs provide that the price will be adjusted annually in accordance with the IPCA. However, some of our CCEARs establish other indexes to adjust prices, such as fuel prices. Distributors grant financial guarantees (mainly receivables from the distribution service) to generators in order to secure their payment obligations under the CCEAR.

With respect to the CCEAR related to electricity generated by existing generation facilities, there are three alternatives for the permanent reduction of contracted electricity: (i) compensation for the exit of Potential Free Consumers from the Regulated Market; (ii) reduction, at the distribution company's discretion, of up to 4.0% per year over the initial contracted amount from existing power generation, excluding the first year of supply, due to market deviations from estimated market projections, beginning two years after the initial electricity demand was declared; and (iii) adjustments to the amount of electricity established in energy acquisition contracts entered into before March 17, 2004. Furthermore, the ANEEL Normative Resolution No. 824/2018 established the Surplus Selling Mechanism, which allows electricity distributors to voluntarily to sell excess energy to Free and Special Consumers, generators and self-generators periodically several times per year through 12-month, 6-month and 3-month agreements.

Since 2005, CCEE has conducted 25 auctions for new generation projects, 17 auctions specifically for existing power generation facilities, three auctions for alternative generation projects and nine auctions for biomass and wind power generation, qualified as "reserve energy." In accordance with Decree No. 9,143/2017, the MME must publish an estimated annual schedule of regulated auctions by March 30 of each year and, no later than August 1 of each year, distributors must provide their estimated electricity demand for the five subsequent years. Based on this information, the MME establishes the total amount of electricity to be traded in the auction and decides which generation companies may participate in the auction. As a general rule, contracts entered into in an auction have the following terms: (i) from 15 to 35 years from commencement of supply in cases of new generation projects; (ii) from one to 15 years beginning in the year following the auction in cases of existing power generation facilities; (iii) from 10 to 35 years from commencement of supply in cases of alternative generation projects; and (iv) a maximum of 35 years for reserve energy.

The Annual Reference Value

The regulation also establishes a mechanism, the Annual Reference Value, which limits the amounts of costs that can be passed through to Final Consumers. The Annual Reference Value corresponds to the weighted average of electricity prices in the "A-6," "A-5," "A-4" and "A-3" auctions, calculated for all distribution companies. The values of auctions for alternative generation projects and for the projects indicated as priorities by the CNPE are not considered when calculating the Annual Reference Value.

The Annual Reference Value creates an incentive for distribution companies to contract for their expected electricity demands at the lowest price in "A-6," "A-5," "A-4" and "A-3" auctions. The regulation establishes the following limitations on the ability of distribution companies to pass through costs to consumers: (i) no pass-through of costs for electricity purchases that exceed 105% of actual demand; and (ii) limited pass-through of costs for electricity purchases in "A-3" and "A-4" auctions, if the volume of the acquired electricity exceeds 2.0% of the demand for electricity. Pursuant to Decree 9,143/2017, the costs from new electricity generation projects and existing energy are passed through in full to consumers. The MME establishes the maximum acquisition price for electricity generated by existing projects that is included in auctions for the sale of electricity to distributors; and, if distributors do not comply with the obligation to fully contract their demand, the pass-through of the costs from energy acquired in the spot market will be the lower of the PLD and the Annual Reference Value.

The PLD is used to value the energy traded in the spot market. It is calculated for each submarket and load level on a weekly basis and it is based on the marginal cost of operation. The maximum value of PLD is set at R\$513.89, according to ANEEL's Resolution No. 2,498/2018. Before such resolution, the maximum value of PLD was R\$505.18 (Resolution No. 2,364/2017) and R\$533.82 (Resolution No. 2,190/2016).

Electric Energy Trading Convention

ANEEL Resolutions No. 109 of 2004 and No. 210 of 2006 govern the Electric Energy Trading Convention (*Convenção de Comercialização de Energia Elétrica*). This convention regulates the organization and administration of the CCEE, as well as the conditions for trading electric energy. It also defines, among other things: (i) the rights and obligations of CCEE participants; (ii) the penalties to be imposed on defaulting participants; (iii) the structure for dispute resolution; (iv) the trading rules in both Regulated and Free Markets; and (v) the accounting and clearing process for transactions in the spot market.

Restricted Activities of Distributors

Distributors in the Interconnected Power System are not permitted to: (i) conduct businesses related to the generation or transmission of electric energy; (ii) hold, directly or indirectly, any interest in any other company, corporation or partnership; or (iii) conduct businesses that are unrelated to their respective concessions, except for those permitted by law or in the relevant concession agreement. Generators are not allowed to control or hold relevant equity interests in distributors.

Under Decree No. 9,143/2017, electricity distributors were allowed to negotiate energy surpluses with Free Consumers and other agents of the Free Market (generators, traders and self-producers). This ability has since been replaced by the Surplus Selling Mechanism, which was introduced by ANEEL's Normative Resolution No. 824/2018 and went into effect in January 2019. See “—Distribution—Purchases of Electricity.”

Elimination of Self-Dealing

Since the purchase of electricity for Captive Consumers is currently performed through the Regulated Market, “self-dealing” (under which distributors were permitted to meet up to 30.0% of their electric energy needs through energy that was either self-generated or acquired from affiliated companies) is no longer permitted, except in the context of agreements that were approved by ANEEL before the enactment of the New Regulatory Framework.

Challenges to the Constitutionality of the New Regulatory Framework

Political parties are currently challenging the New Regulatory Framework on constitutional grounds before the Brazilian Federal Supreme Court. In October 2007, the Brazilian Federal Supreme Court issued a decision regarding injunctions that had been requested in the matter, denying the injunctions by a majority of votes. To date, the Brazilian Federal Supreme Court has not reached a final decision, and we do not know when such a decision may be reached. While the Brazilian Federal Supreme Court is reviewing the New Regulatory Framework, its provisions remain in effect. Regardless of the Brazilian Federal Supreme Court's final decision, certain portions of the New Regulatory Framework relating to restrictions on distributors engaging in businesses unrelated to the distribution of electricity, including sales of energy by distributors to Free Consumers and the elimination of self-dealing, are expected to remain in full force and effect.

If the Brazilian Federal Supreme Court deems all or a material portion of the New Regulatory Framework to be unconstitutional, the regulatory scheme introduced by the New Regulatory Framework may become void, which will create uncertainty as to how and when the Brazilian government will be able to reform the electric energy sector.

Ownership Limitations

ANEEL had established limits on the concentration of certain services and activities within the electric energy industry, which it eliminated through Resolution No. 378 of November 10, 2009. Under Resolution No. 378, ANEEL submitted potential antitrust violations in the electric energy sector for analysis by the SDE, which has been the responsibility of CADE since Law No. 12,529/2011 went into effect. ANEEL also has the power to monitor potential antitrust activity, either at its own discretion or upon request of CADE, by identifying: (i) the relevant market; (ii) the influence of the parties involved in the exchange of energy on the submarkets where they operate; (iii) the actual exercise of market power in connection with market prices; (iv) the participation of the parties in the power generation market; (v) the transmission, distribution and commercialization of energy in all submarkets; and (vi) distribution entities' efficiency gains during the tariff review process.

In practical terms, ANEEL's role is limited to supplying CADE with technical information to support technical opinions by CADE. CADE, in turn, defers to ANEEL's comments and decisions, and may only disregard them if it demonstrates its reasons for doing so. Before Law No. 12,529/2011, certain responsibilities of CADE were performed by SDE and technical opinions regarding competition matters were issued by the SDE in the first instance and decided by CADE in the second instance.

System Tariffs

ANEEL oversees tariff regulations that govern access to the distribution and transmission systems and establishes tariffs for use of these systems and energy consumption. Different tariffs apply to different categories of consumers in accordance with how they connect to the system and purchase energy. The tariffs are: (i) the TUSD; (ii) tariffs for the use of the transmission system, consisting of the Basic Network and its ancillary facilities, or TUST; and (iii) the TE.

TUSD

The TUSD is paid by generators and consumers for the use of the distribution system of the distribution concessionaire to which the relevant generator or consumer is connected. The TUSD consists of three tariffs with distinct purposes:

- The TUSD Wire (*TUSD Fio*), which is set in R\$/kW, divided into time segments according to the tariff category, is applied to the electricity demand contracted by the party connected to the system, and remunerates the distribution and transmission concessionaire for costs of operating, maintaining and upgrading the distribution system. It also provides the distribution concessionaire with a legal margin.
- The TUSD Charges (*TUSD Encargos*), which is set in R\$/MWh, is applied to electricity consumption (in MWh) and contemplates certain regulatory charges applicable to the use of the local network, such as the Proinfra Program, the CDE Account, the TFSEE, the ONS and others. These charges are set by regulatory authorities and linked to the quantity of energy carried by the system.
- The TUSD Loss (*TUSD Perdas*) compensates for technical losses of energy on the transmission and distribution systems, as well as non-technical losses of energy on the distribution system.

TUST

The TUST is paid by distribution companies, generation companies and Free Consumers who connect directly to the Basic Network. It applies to their use of the Basic Network and is revised annually according to (i) an inflation index; and (ii) the annual revenue of the transmission companies as determined by ANEEL. According to criteria established by ANEEL, owners of the different parts of the transmission network were required to transfer the coordination of their facilities to the ONS in return for receiving regulated payments from the transmission system users. Network users, including generation companies, distribution companies and Free Consumers directly connected to the transmission network, sign contracts with the ONS and the transmission companies (represented by the ONS) entitling them to the use of the transmission network in return for the payment of certain tariffs.

TE

The TE is paid by Captive Consumers for energy consumption, based on the amount of electricity actually consumed. It remunerates the cost of energy, certain regulatory charges related to the use of energy, transmission costs related to Itaipu, certain transmission system losses related to the Captive Consumer market, R&D charges and TFSEE.

Basis for Calculation of Distribution Tariffs

ANEEL has the authority to adjust and review the above tariffs in response to changes in energy purchase costs and market conditions. When calculating distribution tariffs, ANEEL divides the costs of distribution companies between (i) costs that are not under the control of the distributor, or Parcel A Costs, and (ii) costs that are under the control of the distributor, or Parcel B Costs. The readjustment of tariffs is based on a formula that takes into account the division of costs between the two categories.

Parcel A Costs include, among others, the following factors:

- costs of electricity mandatorily purchased from Itaipu and the generation companies renewed under Law No. 12,783/13;

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- costs of electricity purchased pursuant to bilateral agreements that are freely negotiated between the parties;
- costs of electricity purchased pursuant to CCEARs;
- certain other charges for use and connection to the transmission and distribution systems;
- the cost of regulatory charges; and
- the costs associated with research and development and energy-efficient consumption.

Parcel B Costs include, among others, the following factors:

- a rate of return on investments in assets necessary to energy distribution activities (for more information, see “Item 5. Operating and Financial Review and Prospects—Background—Periodic Revisions – RTP”);
- the depreciation on those assets;
- the operating expenses related to the operation of those assets; and
- irrecoverable receivables;

each as established and periodically revised by ANEEL.

The tariffs are established taking into consideration Parcel A and Parcel B Costs and certain market components used by ANEEL as reference for adjusting the tariffs.

Electricity distribution concessionaires are entitled to periodic revisions of their tariffs usually every four or five years. These revisions are aimed at:

- assuring necessary revenues to cover efficient Parcel B operational costs and adequate compensation for investments deemed essential for the services within the scope of each such company’s concession;
- incentivizing concessionaires to increase their efficiency levels; and
- determining the “X factor,” which consists of three components:
 - potential increases in productivity, based on costs as compared to market growth;
 - service quality; and
 - an operating expense target.

Increases in productivity and the operating expense target are determined at each periodic review. Starting in the fourth periodic revision cycle, the service quality is determined at annual adjustment and periodic review. For concessionaires whose contracts were extended in 2015 and that undergo tariff revisions after February 24, 2017, there will also be an annual update of the productivity (Pd) component.

The X factor is used to adjust the proportion of the change in the IGP-M index that is used in the annual adjustments. Accordingly, upon the completion of each periodic revision, application of the X factor requires distribution companies to share their productivity gains with Final Consumers.

Each distribution company's concession agreement also provides for an annual adjustment. In general, Parcel A Costs are fully passed through to consumers. Parcel B Costs, however, are mostly restated for inflation in accordance with the IGP-M index and X factor. However, for concessionaires whose contracts were extended in 2015, the inflation index used to restate Parcel B is the IPCA.

In addition, electricity distribution concessionaires are entitled to an extraordinary tariff review (*revisão extraordinária*) on a case-by-case basis, to ensure their financial stability and compensate them for unpredictable costs, including taxes that significantly change their cost structure.

With the introduction of the New Regulatory Framework, the MME has acknowledged that the variable costs associated with the purchase of electric energy may be included by means of the Parcel A Account or CVA, an account created to recognize some of our costs when ANEEL adjusts the tariffs of our distribution subsidiaries. See “Item 5. Operating and Financial Review and Prospects—Overview—Recoverable Costs Variations—Parcel A Costs” for more information.

Beginning in 2005, the costs incurred with PIS and COFINS ceased to be considered in the periodic revisions as part of Parcel B, and electricity distribution concessionaires became entitled to add such costs directly over the tariffs established in the periodic revisions, based on an effective rate which is different than the nominal rate. The purpose of this change was to maintain neutrality in the financial equilibrium of the concession in view of the alteration in the way these taxes are collected, which became non-cumulative.

In December 2011, ANEEL established the methodology and procedures applicable to further periodic revisions as of that year. Previously, all revisions in methodologies were addressed in set cycles such as in 2008–2010 and 2010–2014. However, in 2015, ANEEL changed this procedure to allow for the review of the underlying methodologies applicable to the electricity sector from time to time on an item by item basis. See “Item 5. Operating and Financial Review and Prospects—Background” and “Item 3. Key Information—Risk Factors—The tariffs that we charge for sales of electricity to Captive Consumers and the tariffs for using the distribution system that we charge to Free and Special Consumers are determined by ANEEL pursuant to concession agreements with the Brazilian government, so our operating revenues could be adversely affected if ANEEL makes decisions relating to our tariffs that are not favorable to us” for more information regarding tariff revisions and methodologies.

Since 2013, variables such as the need to dispatch of thermal plants have caused distributors to incur extraordinary costs that exceed their ability to pay. To cover the distributors’ involuntary exposure to these costs, a portion of the energy cost was reimbursed by the CDE Account (under Decree No. 7,945/2013) and the ACR Account (under Decree No. 8,221/2014). These reimbursements aimed to cover all or part of the costs incurred by distributors between January 2013 and December 2014 relating to (i) their involuntary exposure to the spot market and (ii) the dispatch of thermoelectric plants related to the CCEAR. The CCEE, which manages the ACR Account, obtained a credit facility from 13 banks to fund this payment. Starting January 2015, distribution companies have been collecting additional electricity tariffs from consumers in order to amortize the CDE reimbursement over five years and the credit facility over 54 months. The CDE quotas set by ANEEL in 2015 and passed through to consumers already take account of these obligations. In addition, since these CDE and energy purchase costs remain high, ANEEL increased tariffs by means of an extraordinary tariff review, the RTE, applicable to all distribution companies under Resolution No. 1,858 of February 27, 2015. This RTE aims to pass through to consumers the forecast costs in the period from March 2015 to the date of the distribution company’s next tariff review or adjustment.

In January 2015, the electricity sector began to implement a mechanism of monthly “tariff flags” under which consumer invoices may be subject to tariff additions on a monthly basis when energy supply costs reach certain levels, enabling consumers to adapt their usage to current energy costs. Previously, the pass-through of energy costs to tariffs was set annually. The tariff flag system was initially approved in 2011 and was tested during 2013 and 2014. At the beginning it consisted of a green (normal), yellow (heightened) or red (critical) tariff flag, determined by ANEEL on the basis of electricity generation conditions, pursuant to Decree 8,401 of February 4, 2015. As from February 1, 2016, the tariff system flag was modified by ANEEL, and currently consists of a green (normal), yellow (heightened) or two level of red (critical stage 1 and stage 2) tariff flags. Revenues billed under the tariff flag system are collected

by the distribution companies and paid into a Tariff Flag Resources Centralizing Account (*Conta Centralizadora dos Recursos de Bandeiras Tarifárias*), or CCRBT administered by the CCEE from which the revenues are repaid to distribution companies on the basis of their relative energy cost for the period.

Due to the poor hydrological conditions that were observed from 2013 through 2015, red tariff flags were applied throughout 2015 since the system was introduced in January 2015. In 2016, due to an improvement in hydrological conditions, green tariff flags were applied in most months of the year, but 2017 consisted principally of yellow and red tariff flags. In 2018, green tariff flags were applied from January to April and again in December, yellow tariff flags were applied in May and November, and red tariff flags were applied from June to October. Although this mechanism mitigates the cash flow mismatch in part, it may be insufficient to cover the thermoelectric energy supply costs, and distributors still bear the risk of cash flow mismatches in the short term.

Government Incentives to the Energy Sector

In 2000, a federal decree created the Thermoelectric Priority Program (*Programa Prioritário de Termoeletricidade*), or PPT, for purposes of diversifying the Brazilian energy matrix and decreasing its strong dependency on Hydroelectric Power Plants. The incentives granted to the Thermoelectric Power Plants included in the PPT are: (i) guarantee of gas supply for up to twenty years, pursuant to MME regulations; (ii) an assurance that the costs related to the acquisition of the electric energy produced by Thermoelectric Power Plants will be transferred to tariffs up to the normative value established by ANEEL; and (iii) guaranteed access to a special financing program for the electric energy industry from BNDES.

In 2002, the Brazilian government established the Proinfa Program. Under the Proinfa Program, Eletrobras offers purchase guarantees of up to 20 years for energy generated from alternative sources, and this energy is acquired by distribution companies for delivery to Final Consumers. The purchase cost of this alternative energy is borne by the Final Consumers on a monthly basis (except for low income Final Consumers, who are exempt from such payments), based on an annual purchase estimation plan made by Eletrobras and approved by ANEEL. In its initial phase, the Proinfa Program was limited to a total contracted capacity of 3,299 MW. The objective of this initiative was to reach a contracted capacity of up to 10% of the total annual electricity consumption in Brazil within 20 years starting from 2002.

In order to create incentives for alternative generators, the Brazilian government has established that a reduction of not less than 50% applies to TUSD amounts owed by: (i) Hydroelectric Power Plants with capacity equal to or lower than 50,000 kW; and (ii) alternative energy generators (solar, wind power and biomass generators) with capacity up to 300,000 kW. As law and regulations change over the years, the applicable reductions are set forth in each power plant's authorization. The reduction is applicable to the TUSD due by the generation entity and also by its consumer. The amount of the TUSD reduction is reviewed and approved by ANEEL and reimbursed through CDE, by an on a monthly basis deposit made by CCEE.

Regulatory Charges

EER

The EER is a regulatory charge assessed on a monthly basis designed to raise funds for energy reserves contracted by CCEE. These energy reserves are used to increase the safety of the energy supply in the Interconnected Power System. The EER is collected on a monthly basis from Final Consumers of the Interconnected Power System registered with CCEE.

RGR Fund and UBP

In certain circumstances, electric energy companies are compensated for certain assets used in connection with a concession if the concession is revoked or is not renewed. In 1957, the Brazilian government created a reserve fund designed to provide funds for such compensation, known as the "RGR Fund." Public service generation companies must make monthly contributions to the RGR Fund at an annual rate equal to 2.5% of the company's annual investments in fixed assets related to the rendering of public services, not to exceed 3.0% of total operating revenues in any year. Law No. 12,431 of 2011 extended the imposition of this fee until 2035. However, Law No. 12,783/13 provides that, as of January 1, 2013, this charge is no longer levied on distribution companies, generation and transmission concessions which had the concession extended under that law or new generation and transmission concessionaires.

Independent Power Producers that use hydropower sources must also pay a fee similar to the fee levied on public service generation companies in connection with the RGR Fund. Independent Power Producers are required to make contributions for UBP, according to the rules set out in the public tender for the relevant concession. Eletrobras received the UBP payments until December 31, 2002. All charges related to the UBP since December 31, 2002 have been paid directly to the Brazilian government.

CDE Account

In 2002, the Brazilian government instituted the CDE Account, which is funded through annual payments made by concessionaires for the use of public assets, penalties and fines imposed by ANEEL and the annual fees paid by agents offering electric energy to Final Consumers, by means of a charge to be added to the tariffs for the use of the transmission and distribution systems. These fees are adjusted annually. The CDE Account was originally created to support: (i) the development of energy production throughout Brazil; (ii) the production of energy by alternative energy sources; and (iii) the universalization of electric energy services throughout Brazil. In addition, the CDE Account subsidizes the operations of thermoelectric generation companies for the purchase of fuel in isolated areas not connected to the Interconnected Power System, which costs were supported by the CCC Account, before the enactment of Law No. 12,783/13. As from January 23, 2013, (Decree No. 7,891/13), the CDE Account subsidizes discounts for certain categories of consumers, such as Special Consumers, rural consumers, distribution concessionaires and permissionaires, among others. By Decree 7,945 dated March 7, 2013, the Brazilian government decided to use the CDE Account to subsidize: (i) a portion of the distribution companies' energy costs on thermal generation in 2013; (ii) the hydrological risks of the generation concessions renewed under Law No. 12,783/13; (iii) the involuntary energy under contract shortage because some generation concessions did not seek to renew their contracts and the energy produced by those concessions could not be reallocated to distributors; and (iv) part of the ESS and the CVA, such that the impact of tariff adjustments in connection with these two accounts was limited to 3% of adjustments from March 8, 2013 to March 7, 2014. The CDE Account will be in effect for 25 years from 2002. It is regulated by ANEEL and managed by CCEE.

ESS – System Service Charge

Resolution No. 173 of November 28, 2005 established a provision for the ESS, which since January 2006 has been included in price and fee readjustments for distribution concessionaires that are part of the National Interconnected System (*Sistema Interligado Nacional*). This charge is based on the annual estimates made by ONS on October 31 of each year.

In 2013, due to adverse hydrological conditions, the ONS dispatched a number of Thermoelectric Power Plants, leading to increased costs. These dispatches caused a significant increase in the ESS-SE. Since the ESS-SE charge applies only to distribution companies (although it can subsequently be passed on by them to consumers) and to Free Consumers, the CNPE decided, through Resolution No. 03/2013, to spread the cost by extending the ESS-SE charge to all players in the electricity industry. This decision increased the cost base of our subsidiaries in businesses other than Distribution (since they cannot pass on the cost to consumers), principally our Generation segment. However, certain industry participants, including our Generation subsidiaries, are contesting the validity of Resolution No. 03/2013 and have obtained a court injunction, which was confirmed by the Brazilian Federal Supreme Court, exempting them from the ESS-SE.

Fee for the Use of Water – CFURH

The New Regulatory Framework requires that holders of a concession and authorization to use water resources must pay a fee of 7.00% of the value of the energy they generate by using such facilities. This charge must be paid to the federal district, states and municipalities where the plant itself or the plant's reservoir is located.

ANEEL Inspection Fee – TFSEE

The ANEEL Inspection Fee or TFSEE is an annual fee due by the holders of concessions, permissions or authorizations in the proportion of their dimension and activities.

ONS Fee

The ONS Fee, a monthly fee due by distribution concessionaires, is used to fund the budget of the ONS in its role to coordinate and control the production and transmission of energy in the Interconnected Power System.

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Default on the Payment of Regulatory Charges

The New Regulatory Framework provides that failure to pay required contributions to the regulatory agent, or certain other payments, such as those due from the purchase of electric energy in the Regulated Market or from Itaipu, will prevent the defaulting party from proceeding with readjustments or reviews of its tariffs (except for extraordinary revisions) and will also prevent the defaulting party from receiving funds from the RGR Fund and CDE Account and from participating in the Surplus Selling Mechanism.

Energy Reallocation Mechanism

Centrally dispatched hydroelectric generators are protected against certain hydrological risks by the MRE, which attempts to mitigate the risks involved in the generation of hydrological energy by mandating that hydroelectric generators share the hydrological risks of the Interconnected Power System. Under Brazilian law, each Hydroelectric Power Plant is assigned an Assured Energy, which is determined in each relevant concession agreement, irrespective of the volume of electricity generated by the facility. The MRE transfers surplus electricity from those generators that have produced electricity in excess of their Assured Energy to those generators that have produced less than their Assured Energy. The effective generation dispatch is determined by ONS, who takes into account nationwide electricity demand and hydrological conditions. The volume of electricity actually generated by the plant, whether less than or in excess of the Assured Energy, is priced pursuant to a tariff denominated Energy Optimization Tariff (*Tarifa de Energia de Otimização*), which covers the operation and maintenance costs of the plant. This revenue or additional expense must be accounted for monthly by each generator.

Generation Scaling Factor

The Generation Scaling Factor, or GSF, is a ratio that compares the sum of the volume of energy generated by all hydroelectric companies participating in the MRE to the volume of Assured Energy that they committed to deliver in their contractual obligations. If the GSF ratio is below 1.0, *i.e.*, less than the total Assured Energy is being generated, hydroelectric companies must purchase energy in the spot market to cover the energy shortage and meet their Assured Energy volumes under the MRE. From 2005 to 2012, the GSF remained above 1.0. The GSF began to deteriorate in 2013, worsening in 2014 when the GSF remained below 1.0 for the entire year. In 2015, the GSF ranged from 0.783 to 0.825, requiring electricity generators to purchase energy in the spot market, thereby incurring significant costs.

Following discussions between generation companies and the Brazilian government regarding these costs, the government enacted Federal Law 13,203 on December 8, 2015. This law addressed the GSF risk separately for the Regulated Market and the Free Market. In the Regulated Market, Federal Law 13,203 allowed generation companies to renegotiate their PPAs, setting the GSF cost at a risk premium of R\$9.50/MWh per year through the end of the PPA or the end of the concession, whichever occurs sooner. This risk premium payment will be paid to the CCRBT.

In December 2015, our subsidiaries CERAN, CPFL Jaguari Geração (Paulista Lajeado) and CPFL Renováveis, as well as joint ventures ENERCAN and Chapecoense opted to renegotiate their Regulated Market contracts, and also cancelled their lawsuits. In January 2016, our joint venture BAESA opted to renegotiate its Regulated Market contracts. Therefore, the hydrologic risks were transferred to the CCRBT.

ITEM 4A. Unresolved Staff Comments

None.

ITEM 5. Operating and Financial Review and Prospects

The following discussion should be read in conjunction with our audited annual consolidated financial statements and the notes thereto included elsewhere in this annual report.

We prepared our audited annual consolidated financial statements included in this annual report in accordance with IFRS, as issued by IASB. As of January 1, 2018, IFRS 9 and 15 came into effect. See Note 3.17 of our audited annual consolidated financial statements for the effects of our adoption of such new IFRS standards.

Beginning in 2018, due to the way our new Management monitors segment results, (i) intangible assets acquired in business combination transactions that are recorded in the parent company and were previously allocated to the respective segments are now allocated to the segment “Others”; and (ii) eliminations between different segments are now classified in the “elimination” column instead of being presented in each segment. For comparison purposes, the segment information disclosed for 2017 has been restated using the same criteria. The 2016 related segment information has not been restated as the effects are immaterial.

Overview

We are a holding company and, through our subsidiaries, we: (i) distribute electricity to consumers in our concession areas; (ii) generate electricity from conventional and renewable sources and develop generation projects; (iii) engage in electricity commercialization; and (iv) offer electricity-related services. We have four broad initiatives to improve our financial performance: (i) the expansion of our generation Installed Capacity through greenfield and brownfield investments; (ii) the acquisition of additional distributors; (iii) the consolidation of our commercialization business; and (iv) the development of our service business.

Two important drivers of our financial performance are our operating income margin and cash flows from our regulated distribution business. In recent years, our regulated distribution business has produced reasonably stable margins, and its cash flows, while sometimes subject to short-term variability, have been stable over the medium term. Nevertheless, there are factors beyond our control that can have a significant impact, positive or negative, on our financial performance. We face periodic changes in our tariff structure, resulting from the periodic regulatory review of our tariffs. Every periodic review since 2015, including each periodic review performed in 2018, has resulted in an increase in the average tariffs. See “—Background—Periodic Revisions—RTP” for more information.

In May 2016, two generation facilities at SHPP Mata Velha commenced operations, over a year and a half ahead of schedule. Mata Velha, located in Unaí, in the state of Minas Gerais, has Installed Capacity of 24 MW and an average physical guarantee of 13.1 MW. According to the A-5/2013 Energy Auction, the plant’s energy trading agreement took effect in January 2018. Since the plant was completed ahead of schedule, a free market sale agreement was signed, valid until the A-5 2013 agreement took effect.

On June 15, 2016, our subsidiary CPFL Jaguariúna Participações Ltda. agreed to acquire 100% of AES Sul Distribuidora Gaúcha de Energia S.A. (which subsequently changed its name to RGE Sul Distribuidora de Energia S.A.) from AES Guaíba II Empreendimentos Ltda. The transaction closed on October 31, 2016, and the financial results of RGE Sul are reflected in our audited annual consolidated financial statements for November and December 2016.

In December 2016, the last 15 of 110 wind turbines of the Campo dos Ventos wind complex (consisting of the São Domingos, Ventos de São Martinho and Campo dos Ventos I, III and V Wind Farms) and São Benedito wind complex (consisting of the Ventos de São Benedito, Ventos de Santo Dimas, Santa Mônica and Santa Úrsula Wind Farms) started to enter into operations. The first wind turbines commenced operations in May 2016. The complexes have 231 MW of Installed Capacity. The Campo dos Ventos and São Benedito wind farms are located in the state of Rio Grande do Norte.

The wind farms at the Pedra Cheirosa wind complex (Pedra Cheirosa I and II), located in the municipality of Itarema, in the state of Ceará, started operations on June 27, 2017, almost a year earlier than expected. The installed capacity is of 48.3 MW and the assured energy is of 26.1 MWavg. Energy was sold through long-term contracts in the 2013 A-5/2013 Energy Auction (at R\$156.20/MWh for Pedra Cheirosa I and at R\$156.82 for Pedra Cheirosa II, both in June 2017).

On November 21, 2017, through the Resolution for Authorization No. 6,723/2017, ANEEL approved our proposal to consolidate the concessions of five of our distribution companies (CPFL Santa Cruz; Companhia Leste Paulista de Energia; Companhia Sul Paulista de Energia; Companhia Luz e Força de Mococa; and CPFL Jaguari, together the Merged Companies), pursuant to Normative Resolution No. 716/2016. Effective as of January 1, 2018, the Merged Companies were merged with and into a company named CPFL Santa Cruz (which company was previously named CPFL Jaguari). This transaction was approved at the Extraordinary General Meetings held on December 31, 2017 at each of the Merged Companies. This merger led to the optimization of our administrative and operational costs and produced large-scale savings and synergy in 2018. See Note 14.4.2 of our audited annual consolidated financial statements for more information. According to Normative Resolution No. 716/2016, until the first tariff review of the Merged Companies in March 2021, ANEEL may institute a policy that reconciles the variations in the old tariffs for each of the Merged Companies and the new unified tariff for CPFL Santa Cruz over time. ANEEL decided to introduce the unified tariff during the March 2018 tariff adjustment.

On December 15, 2017, the management of RGE Sul and its parent company CPFL Jaguariúna approved the merger of CPFL Jaguariúna and RGE Sul. As a consequence of this merger, CPFL Jaguariúna was dissolved. This merger aimed to improve our governance structure and increase synergy with the other companies of the CPFL Energia group.

On June 29, 2018, we won the right to conduct transmission activities in Transmission Auction No. 2/2018 held by ANEEL. We were also awarded the concession for the Maracanaú II Substation and segments of transmission lines, located in the state of Ceará.

At the A-6/2018 Energy Auction, CPFL Renováveis sold 28.5 MWavg to be generated by SHPP Lucia Cherobim, located in the state of Paraná, with Installed Capacity of 28.0 MW (16.5 MWavg) and by the Gameleira wind complex, located in the state of Rio Grande do Norte, with Installed Capacity of 69.3 MW (12.0 MWavg). The agreement will be extended for 30 years for SHPP Lucia Cherobim and 20 years for Gameleira wind complex, with energy supply starting on January 1, 2024. SHPP Lucia Cherobim sold 16.5 MWavg at R\$189.95/MWh (base August 2018), with annual adjustments by the IPCA index to the auction ceiling price of R\$290.00/MWh. The Gameleira wind complex sold 12.0 MWavg at R\$89.89/MWh (base August 2018), with annual adjustments by the IPCA index to the auction ceiling price of R\$227.00/MWh. Additionally, the Gameleira wind complex sold its remaining energy in the Free Market.

On November 26, 2018, SHPP Boa Vista 2 commenced operations, after receiving ANEEL's authorization for commercial launch on the same date. This commercial launch occurred more than a year prior to CPFL Renováveis' originally scheduled project launch date. SHPP Boa Vista 2 is located in the municipality of Varginha, in the state of Minas Gerais, has Installed Capacity of 29.9 MW and a physical guarantee of 15.54 MWavg. The energy of SHPP Boa Vista 2 was commercialized in the A-5/2015 Energy Auction, with an original supply start date of January 2020. Until January 2020, when the A-5/2015 Energy Auction agreement takes effect, the energy generated by SHPP Boa Vista 2 will be supplied to the system and sold in the spot market, generating additional returns for the project.

On December 4, 2018, through the Resolution for Authorization No. 7,499/2018, ANEEL approved our proposal to consolidate the concessions of our two distribution companies (RGE and RGE Sul), pursuant to Normative Resolution No. 716/2016. RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019. This transaction was approved at the Extraordinary General Meetings held on December 31, 2018 at each of RGE and RGE Sul. As a result of this merger transaction and the related transfer of the assets of RGE to RGE Sul, RGE no longer exists. See "Item 4. Information on the Company—Overview" and Note 14.5.1 of our audited annual consolidated financial statements for more information.

On December 20, 2018, we won the right to conduct transmission activities through Transmission Auction No. 4/2018 held by ANEEL. In this auction, we also won new Substations and transmission lines in the states of Santa Catarina and Rio Grande do Sul.

Background

Regulated Distribution Tariffs

Our results of operations are significantly affected by changes in regulated tariffs for electricity. In particular, most of our revenues are derived from sales of electricity to Captive Consumers at regulated tariffs. In 2018, sales to Captive Consumers represented 66.2% of the volume of electricity we delivered and 63.3% of our operating revenues, compared to 65.9% of the volume of electricity we delivered and 59.7% of our operating revenues in 2017. These proportions may decline if consumers migrate from captive to free status.

Our operating revenues and our margins depend substantially on the tariff-setting process, and our Management focuses on maintaining a constructive relationship with ANEEL, the Brazilian government and other market participants so that the tariff-setting process fairly reflects our interests and those of our consumers and shareholders. See “Item 4. Information on the Company—Basis for Calculation of Distribution Tariffs” for a description of tariff regulations.

Tariffs are determined separately for each of our four distribution subsidiaries as follows:

- Our concession agreements provide for an annual adjustment to take account of changes in our costs, which for this purpose are divided into costs that are beyond our control (known as Parcel A Costs) and costs that we can control (known as Parcel B Costs). Parcel A Costs include, among other things, increased prices under long-term supply contracts, and Parcel B Costs include, among others, the return on investment related to our concessions and their expansion, as well as maintenance and operational costs. Our ability to fully pass through our electricity acquisition costs to Final Consumers is subject to: (a) our ability to accurately forecast our energy needs and (b) a ceiling linked to a reference value, the Annual Reference Value. The Annual Reference Value is the weighted average of electricity acquisition costs resulting from electricity prices of all public auctions carried out by ANEEL and CCEE in the Regulated Market for electricity to be delivered five and three years from any such auction and only applies during the first three years following the commencement of delivery of the acquired electricity. See “Item 4. Information on the Company—The New Regulatory Framework” for more information regarding all the limitations on the ability of distribution companies to fully pass through their electricity acquisition costs to Final Consumers. Under agreements that were in force before the enactment of these regulatory reforms, we pass through the costs of acquired electricity subject to a ceiling determined by the Brazilian government. The annual tariff adjustment occurs every April for CPFL Paulista, every June for RGE, every October for CPFL Piratininga and every March for CPFL Santa Cruz (prior to February 2016, the tariff adjustments for CPFL Santa Cruz occurred every February). There is no annual adjustment in a year with a periodic revision.
- Our concession agreements provide for a periodic revision (*revisão periódica*), every five years for CPFL Paulista, CPFL Santa Cruz and RGE, and every four years for CPFL Piratininga in order to restore the financial equilibrium of our tariffs as contemplated by the concession agreements and to determine a reduction factor (known as the X factor) in the amount of any increase to Parcel B Costs passed on to all of our consumers. ANEEL’s Resolution No. 457/2011 has established the methodology to be applied to the third periodic revision cycle (2011 to 2014). As of 2015, ANEEL now reviews the underlying methodologies applicable to the electricity sector from time to time on an item by item basis, whereas previously all methodologies were addressed in set cycles such as in 2008–2010 and 2010–2014. See “Item 3. Key Information—Risk Factors—The tariffs that we charge for sales of electricity to Captive Consumers and the tariffs for using the distribution system that we charge to Free and Special Consumers are determined by ANEEL pursuant to concession agreements with the Brazilian government, so our operating revenues could be adversely affected if ANEEL makes decisions relating to our tariffs that are not favorable to us” and “Item 4. Information on the Company—Basis for Calculation of Distribution Tariffs” for more information.
- Brazilian law also provides for an extraordinary revision (*revisão extraordinária*) to take account of unforeseen changes in our cost structure. The last extraordinary revisions took place on January 24, 2013 and February 27, 2015. The 2013 event aimed to adjust our tariffs as a result of the changes introduced by Law No. 12,783/13. Law No. 12,783/13 reduced the CDE Account charge and eliminated the CCC Account and RGR Fund charges, therefore reducing the Parcel A Costs (energy prices, charges for the use of the Basic Network and regulatory charges, which we pass on to our consumers). In 2015, tariffs were increased to take into account the extraordinary costs due to the full

dispatch of thermal plants and distributors' involuntary exposure. No extraordinary revision occurred in 2016, 2017 or 2018.

Annual Adjustment — RTA

On November 21, 2017, through the Resolution for Authorization No. 6,723/2017, ANEEL approved our proposal to consolidate the concessions of five of our distribution companies (CPFL Santa Cruz; Companhia Leste Paulista de Energia; Companhia Sul Paulista de Energia; Companhia Luz e Força de Mococa; and CPFL Jaguari, together the Merged Companies), pursuant to Normative Resolution No. 716/2016. Effective as of January 1, 2018, the Merged Companies were merged with and into a company named CPFL Santa Cruz (which company was previously named CPFL Jaguari). This transaction was approved by Extraordinary General Meetings held on December 31, 2017 at each of the Merged Companies. See “Item 4. Information on the Company—Overview” and Note 14.4.2 of our audited annual consolidated financial statements for more information. According to Normative Resolution No. 716/2016, until the first tariff review of the Merged Companies in March 2021, ANEEL may institute a policy that reconciles the variations in the old tariffs for each of the Merged Companies and the new unified tariff for CPFL Santa Cruz over time. ANEEL decided to introduce the unified tariff during the March 2018 tariff adjustment.

On December 4, 2018, through the Resolution for Authorization No. 7,499/2018, ANEEL approved our proposal to consolidate the concessions of our two distribution companies (RGE and RGE Sul), pursuant to Normative Resolution No. 716/2016, amended by Normative Resolution No. 835/2018. RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019. This transaction was approved at the Extraordinary General Meetings held on December 31, 2018 at each of RGE and RGE Sul. This merger is expected to optimize our administrative and operational costs and produce large-scale savings and synergy in 2019. See “Item 4. Information on the Company—Overview” and Note 14.5.1 of our audited annual consolidated financial statements for more information.

Tariff increases apply differently to different consumer classes, with generally higher increases for consumers using higher voltages, to reduce the effects of historical cross-subsidies in their favor that were mostly eliminated in 2007. The following table sets forth the average percentage increase in our tariffs resulting from each annual adjustment from 2015 through the date of this annual report. Rates of tariff increase should be evaluated in light of the Brazilian inflation rate. See “—Background—Brazilian Economic Conditions” for more information.

	CPFL Paulista	CPFL Piratininga	RGE ⁽⁸⁾	RGE Sul	CPFL Santa Cruz ⁽⁷⁾	CPFL Mococa ⁽⁷⁾	CPFL Leste Paulista ⁽⁷⁾	CPFL Sul Paulista ⁽⁷⁾	CPFL Jaguari ⁽⁷⁾
2015									
Economic adjustment ⁽¹⁾	37.31%	40.22% ⁽⁴⁾	(24.99)%	(6)	22.01%	28.90%	28.82%	30.24%	40.07%
Regulatory adjustment ⁽²⁾	4.14%	16.15% ⁽⁴⁾	8.50%	(6)	12.67%	(5.55)%	(8.02)%	(5.36)%	(1.61)%
Total adjustment	41.45%	56.37% ⁽⁴⁾	33.48%	(6)	34.68%	23.34%	20.80%	24.88%	38.46%
2016									
Economic adjustment ⁽¹⁾	(0.29)%	(5.35)%	(0.67)%	(6)	11.59% ⁽⁵⁾	11.90% ⁽⁵⁾	17.01% ⁽⁵⁾	16.89% ⁽⁵⁾	17.01% ⁽⁵⁾
Regulatory adjustment ⁽²⁾	10.18%	(7.19)%	(0.81)%	(6)	10.92% ⁽⁵⁾	4.67% ⁽⁵⁾	4.03% ⁽⁵⁾	7.46% ⁽⁵⁾	12.45% ⁽⁵⁾
Total adjustment	9.89%	(12.54)%	(1.48)%	(6)	22.51% ⁽⁵⁾	16.57% ⁽⁵⁾	21.04% ⁽⁵⁾	24.35% ⁽⁵⁾	29.46% ⁽⁵⁾
2017									
Economic adjustment ⁽¹⁾	2.13%	6.33%	2.37%	2.95%	1.37%	3.45%	3.18%	0.97%	3.88%

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Regulatory adjustment ⁽²⁾	(2.93)%	1.37%	1.21%	(3.15)%	(2.65)%	(1.80)%	(2.41)%	0.66%	(1.83)%
Total adjustment 2018	(0.80)%	7.69%	3.57%	(0.20)%	(1.28)%	1.65%	0.77%	1.63%	2.05%
Economic adjustment ⁽¹⁾	8.67%	8.83%	15.56%	11.57%	4.41%	(7)	(7)	(7)	(7)
Regulatory adjustment ⁽²⁾	4.01%	11.18%	5.71%	6.88%	1.30%	(7)	(7)	(7)	(7)
Total adjustment 2019	12.68%	20.01%	21.27%	18.45%	5.71%	(7)	(7)	(7)	(7)
Economic adjustment ⁽¹⁾	2.95%	(3)	(9)	(8)	2.02%	(7)	(7)	(7)	(7)
Regulatory adjustment ⁽²⁾	9.07%	(3)	(9)	(8)	11.68%	(7)	(7)	(7)	(7)
Total adjustment	12.02%	(3)	(9)	(8)	13.70%	(7)	(7)	(7)	(7)

(1) This portion of the adjustment primarily reflects the inflation rate for the period and is used as a basis for the following year's adjustment.

(2) This portion of the adjustment reflects settlement of regulatory assets and liabilities we present in our regulatory financial information, primarily the CVA, and is not considered in the calculation of the following year's adjustment.

(3) Annual adjustments for CPFL Piratininga occur in October.

(4) Represents the effect of RTPs for CPFL Piratininga that occurred in 2015, considering that there is no RTA in the year of RTPs.

(5) Represents the effect of RTPs for CPFL Santa Cruz, CPFL Mococa, CPFL Leste Paulista, CPFL Sul Paulista and CPFL Jaguari (now all merged into CPFL Santa Cruz) that occurred in 2016, considering that there is no RTA in the year of RTPs. Additionally, on February 3, 2016, ANEEL changed the annual adjustment period for CPFL Santa Cruz, CPFL Leste Paulista, CPFL Sul Paulista, CPFL Mococa and CPFL Jaguari (now all merged into CPFL Santa Cruz) to March every year.

(6) Tariffs defined prior to the acquisition of RGE Sul.

(7) CPFL Santa Cruz, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista merged into CPFL Santa Cruz (formerly CPFL Jaguari) effective as of January 1, 2018. See “Item 4. Information on the Company—Overview” and Note 14.4.2 of our audited annual consolidated financial statements for more information.

(8) RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019. See “Item 4. Information on the Company—Overview” and Note 14.5.1 of our audited annual consolidated financial statements for more information.

(9) Annual adjustments for RGE occur in June.

Periodic Revisions — RTP

On November 22, 2011, ANEEL defined the methodology applicable to the third periodic revision cycle (2011 to 2014) through Resolution No. 457/2011. For the third cycle, ANEEL has designated a method of recognizing which costs we may pass through to our consumers. In addition, ANEEL approved the methodology for calculating the TUSD tariff, and other electricity tariffs, under which distribution companies assume all market risk resulting from tariff indicators. As compared to the previous tariff cycle, this methodology negatively impacted our financial condition and results of operations.

On April 28, 2015, ANEEL established the methodology to be applied in the fourth periodic revision cycle (2015 to 2016) through Resolutions Nos. 648/2015, 649/2015, 650/2015, 652/2015, 657/2015, 660/2015, 682/2015, 685/2015 and 686/2015. The fourth cycle maintains most of the parameters used for the third cycle, such as the definition, by ANEEL, of the costs we may pass to our consumers. Some of the changes for the fourth cycle include a tariff incentive to the development of certain public policies and also the increased importance of the X Factor component in the new tariff formula. Compared to the previous tariff cycle, the new methodology positively impacted our financial condition and results of operations.

As of 2015, ANEEL now reviews the underlying methodologies applicable to the electricity sector from time to time on an item by item basis, whereas previously all methodologies were addressed in set cycles such as in 2008–2010 and 2010–2014.

ANEEL is expected to hold public hearings in 2019 to review the calculation methodology of the regulatory rate of return on capital for the distribution, transmission and generation of electric power segments. Until the end of 2019, ANEEL is expected to establish a new rate of return and, for electricity distribution concessionaires, the new rate is expected to be applied in periodic revisions starting as of January 2020.

The following table sets forth the percentage change in our tariffs resulting from the first, second, third and fourth cycles of periodic revisions.

First cycle	Second cycle	Third cycle	Fourth cycle
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	Adjustment date	Economic adjustment (%)	Adjustment date	Economic adjustment (%)	Adjustment date	Economic adjustment (%)	Adjustment date	Economic adjustment (%)
CPFL Paulista...	April 2003	20.66	April 2008	(14.00)	April 2013	4.67 ⁽³⁾	April 2018	8.67
CPFL Piratinga	October 2003	10.14	October 2007	(12.77)	October 2011	(3.95) ⁽¹⁾⁽³⁾	October 2015	40.14
RGE ⁽⁶⁾	April 2003	27.96	April 2008	2.34	June 2013	(10.27) ⁽³⁾	June 2018	15.56
RGE Sul	April 2003	⁽⁴⁾	April 2008	⁽⁴⁾	April 2013	⁽⁴⁾	April 2018	11.57
CPFL Santa Cruz ⁽⁵⁾	February 2004	17.14	February 2008	(14.41)	February 2012	4.16 ⁽¹⁾⁽²⁾	March 2016	11.59
CPFL Mococa ⁽⁵⁾	February 2004	21.73	February 2008	(7.60)	February 2012	7.18 ⁽¹⁾⁽²⁾	March 2016	11.90
CPFL Leste Paulista ⁽⁵⁾	February 2004	20.10	February 2008	(2.18)	February 2012	(2.00) ⁽¹⁾⁽²⁾	March 2016	17.01
CPFL Sul Paulista ⁽⁵⁾	February 2004	12.29	February 2008	(5.19)	February 2012	(4.48) ⁽¹⁾⁽²⁾	March 2016	16.89
CPFL Jaguari ⁽⁵⁾	February 2004	(6.17)	February 2008	(5.17)	February 2012	(7.15) ⁽¹⁾⁽²⁾	March 2016	17.01

(1) As a result of ANEEL's delay in determining the methodology applicable to the third periodic revision cycle, the periodic review process for CPFL Piratinga was concluded on October 23, 2012, rather than the October 23, 2011, which is the date that complies with the concession agreement. CPFL Santa Cruz, CPFL Jaguari, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista (now merged into CPFL Santa Cruz) had their revision process concluded on February 3, 2013, rather than February 3, 2012, which is the date that complies with the concession agreement. However, the difference of tariffs billed from the date of the revision process specified in the concession agreement and the actual date on which the process was concluded was reimbursed to consumers.

(2) CPFL Santa Cruz, CPFL Jaguari, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista (now merged into CPFL Santa Cruz) filed administrative appeals questioning the results of their periodic review processes. The appeals were assessed by ANEEL in January 2014, with the following results: (i) Dispatch No. 165 of January 28, 2014 alters the tariff revision index from 7.20% to 7.18% for CPFL Mococa, mainly because of a Regulatory Asset Base, or RAB, reduction; (ii) Dispatch 212 of January 30, 2014 alters the tariff revision index from 4.36% to 4.16% for CPFL Santa Cruz, mainly because of a RAB reduction; (iii) Dispatch No. 166 of January 28, 2014 alters the tariff revision index from -2.20% to -2.00% for CPFL Leste Paulista, mainly because of an increase in RAB and regulatory non-technical losses; (iv) Dispatch No. 211 of January 30, 2014 alters the tariff revision index from -4.41% to -4.48 % for CPFL Sul Paulista, mainly because of a RAB reduction; and (v) Dispatch No. 167 of January 28, 2014 alters the tariff revision index of CPFL Jaguari only to the part relating to financial components, mainly because of a RAB increase.

(3) CPFL Piratininga, CPFL Paulista and RGE filed administrative appeals questioning the results of their periodic review processes. CPFL Piratininga questioned the regulatory losses in the periodic review process. The appeal was assessed by ANEEL, and Dispatch No. 3,426, issued on October 8, 2013, altered the result of the periodic review process from -4.45% to -3.95%. CPFL Paulista questioned the Regulatory Asset Base, and Dispatch No. 733 of March 25, 2014 altered the result of the periodic review process from 4.53% to 4.67%. RGE also had the Regulatory Asset Base altered once the assets of the two municipalities, Putinga and Anta Gorda, that won on a tender, were included in the RAB. Therefore, Dispatch No. 1,857 of June 17, 2014 altered the result of the periodic review process from -10.66% to -10.27%.

(4) Tariffs defined prior to the acquisition of RGE Sul.

(5) CPFL Santa Cruz, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista merged into CPFL Santa Cruz (formerly CPFL Jaguari) effective as of January 1, 2018. See “Item 4. Information on the Company—Overview” and Note 14.4.2 of our audited annual consolidated financial statements for more information.

(6) RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019. See “Item 4. Information on the Company—Overview” and Note 14.5.1 of our audited annual consolidated financial statements for more information.

Extraordinary Tariff Adjustment – RTE

Pursuant to Resolution No. 1,858/2015, tariffs were increased as follows to take into account the extraordinary costs incurred by the distribution companies due to full dispatch of thermal plants:

	CPFL Paulista	CPFL Piratininga	RGE ⁽⁴⁾	RGE Sul	CPFL Santa Cruz ⁽¹⁾⁽³⁾	CPFL Mococa ⁽¹⁾⁽³⁾	CPFL Leste Paulista ⁽¹⁾⁽³⁾	CPFL Sul Paulista ⁽¹⁾⁽³⁾	CPFL Jaguari ⁽¹⁾⁽³⁾
2015									
Economic adjustment	0.0%	0.0%	0.0%	(2)	0.0%	0.0%	0.0%	0.0%	0.0%
Regulatory adjustment	32.28%	29.78%	37.16%	(2)	5.16%	11.81%	14.52%	17.02%	16.80%
Total adjustment	32.28%	29.78%	37.16%	(2)	5.16%	11.81%	14.52%	17.02%	16.80%

(1) On April 7, 2015 ANEEL changed, through Resolution No. 1,870/2015, the Extraordinary Tariff Review – RTE of the distributors CPFL Leste Paulista, CPFL Sul Paulista, CPFL Jaguari, CPFL Mococa and CPFL Santa Cruz (now all merged into CPFL Santa Cruz). This correction was necessary to change the value of the monthly quotas of CDE – energy related to Regulated Market, intended for repayment of loans contracted by CCEE in the management of ACR Account. The rates resulting from this rectification entered into force on April 8, 2015.

(2) Tariffs defined prior to the acquisition of RGE Sul.

(3) CPFL Santa Cruz, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista merged into CPFL Santa Cruz (formerly CPFL Jaguari) effective as of January 1, 2018. See “Item 4. Information on the Company—Overview” and Note 14.4.2 of our audited annual consolidated financial statements for more information.

(4) RGE merged into RGE Sul (which now operates under the name RGE) effective as of January 1, 2019. See “Item 4. Information on the Company—Overview” and Note 14.5.1 of our audited annual consolidated financial statements for more information.

Sales to Potential Free Consumers

Brazilian regulations permit Potential Free Consumers to opt out of the Regulated Market and become Free Consumers who contract freely for electricity. See “Item 4. Information on the Company—The New Regulatory Framework—The Free Market” for more information. Our Potential Free Consumers represent a relatively small portion of our total revenues, as compared to our Captive Consumers. These revenues consist of energy sales and TUSD network charges. If a Potential Free Consumer migrates from the Regulated Market and purchases energy in the Free Market, we no longer receive the energy sales revenues, but the Free Consumer is still required to pay us the TUSD network usage charge for their energy. Regarding the reduction in energy sales revenues, we are able in some cases to reduce our energy purchases by the amount required to service these customers in the year of the consumer’s migration, while in other cases we are able to offset the excess by adjusting our energy purchases in future years. Accordingly, we do not believe that the loss of Potential Free Consumers would have a material adverse effect on our results of operations.

Historically, relatively few of our Potential Free Consumers have elected to become Free Consumers. We believe this is because: (i) they consider the advantages of negotiating for a long-term contract at rates lower than the regulated tariff are outweighed by the need to bear additional costs (particularly transmission costs) and long-term price risk; and (ii) some of our Potential Free Consumers, who entered into contracts before July 1995, or who have contracted demand lower than 3.0 MW (2.5 MW as of July 1, 2019 and 2.0 MW as of January 1, 2020), may only change to suppliers that purchase from renewable energy sources, such as Small Hydroelectric Power Plants or biomass. We do not expect that a substantial number of our consumers will become Free Consumers, but the prospects for migration between the different markets (Captive and Free Markets) over the long term, and its long-term implications for our financial results, are difficult to predict.

Prices for Purchased Electricity

The prices of electricity purchased by our distribution companies under long-term contracts executed in the Regulated Market are: (i) approved by ANEEL in the case of agreements entered into before the New Regulatory Framework; and (ii) determined in auctions for agreements entered into thereafter, while the prices of electricity purchased in the Free Market are agreed by bilateral negotiation based on prevailing market rates. In 2018, we purchased 73,689 GWh, compared to 77,974 GWh in 2017. The decrease of 5.50%, or 4,285 GWh, was due to (i) a decrease of 5.5%, or 3,592 GWh, in the volume of energy purchased through auctions in the Regulated Market and bilateral contracts and (ii) a decrease of 5.6%, or 662 GWh, in purchases from Itaipu, each of which were driven by our decreased electricity sales, and (iii) a decrease of 2.7%, or 31 GWh, in electricity purchased for resale under the Proinfra Program. Prices under long-term contracts are adjusted annually to reflect increases in certain generation costs and inflation. Most of our contracts have adjustments linked to the annual adjustment in distribution tariffs, so that the increased costs are passed through to our consumers in increased tariffs. Since an increasing proportion of our energy is purchased at public auctions, the success of our strategies in these auctions affects our margins and our exposure to price and market risk, as our ability to pass through costs of electricity purchases depends on the successful projection of our expected demand.

We also purchase a substantial amount of electricity from Itaipu under take-or-pay obligations at prices that are governed by regulations adopted under an international agreement. Electric utilities operating under concessions in the Midwest, South and Southeast regions of Brazil are required by law to purchase a portion of Brazil's share of Itaipu's available capacity. In 2018, we purchased 11,117 GWh of electricity from Itaipu (20% of the electricity we purchased in terms of volume), as compared to 11,779 GWh (20% of the electricity we purchased in terms of volume) in 2017. See "Item 4. Information on the Company—Distribution—Purchases of Electricity" for more information. The price of electricity from Itaipu is set in U.S. dollars to reflect the costs of servicing its indebtedness. Accordingly, the price of electricity purchased from Itaipu increases in Brazilian *reais* when the *real* depreciates against the U.S. dollar (and decreases when the *real* appreciates). The change in our costs for Itaipu electricity in any year is subject to the Parcel A Cost recovery mechanism described below.

Most of the electricity we acquired in the Free Market was purchased by our commercialization subsidiary CPFL Brasil, which resells electricity to Free Consumers and other concessionaires and licensees (including our subsidiaries). See "—The New Regulatory Framework—The Free Market" for more information.

Recoverable Cost Variations—Parcel A Costs

We use the CVA (the Parcel A cost variation account) to recognize some of our costs in the distribution tariff, referred to as "Parcel A Costs," that are beyond our control. When these costs are higher than the forecasts used in setting tariffs, we are generally entitled to recover the difference through subsequent annual tariff adjustments.

The costs of electricity purchased from Itaipu are set in U.S. dollars and are therefore subject to U.S. dollar exchange rates. If the U.S. dollar appreciates against the *real*, our costs will increase and, consequently, our income will decrease in the same period. These losses will be offset in the future, when the next annual tariff adjustments occur.

See Note 8 to our audited annual consolidated financial statements and "—Sector financial asset and liability."

Sector financial asset and liability

According to the tariff-pricing mechanism applicable to the distribution companies, energy tariffs should be set at a price level (price-cap) that ensures the economic and financial equilibrium of the concession. Therefore,

concessionaires are authorized to charge consumers (i) an annual tariff increase (after review and ratification by ANEEL) and (ii) usually every four or five years, as specified in the concession contract, the periodic review adjustment used to recalculate Parcel A and Parcel B adjustments of certain tariff components, such as changes in the cost of energy purchased and return in infrastructure investments. Furthermore, since January 2015, the electricity sector has implemented a mechanism of monthly “tariff flags,” under which consumer invoices may be subject to tariff additions on a monthly basis when energy supply costs reach certain levels. See “Item 4. Information on the Company—Basis for Calculation of Distribution Tariffs” for more information on the tariff flags system.

The distributors' revenue is mainly derived from the sale and delivery of electric energy. The concessionaires' revenue is determined by the amount of energy delivered and the electric energy tariff, which is determined by Parcel A (non-controllable costs) and Parcel B costs (controllable costs).

This tariff-pricing mechanism may lead to timing differences between the budgeted costs (Parcel A and other financial components) included in the tariff at the beginning of the tariff period and those actually incurred while it is in effect. This difference creates a contractual right to receive cash from consumers through subsequent tariffs, or to pay to (or receive from) the granting authority any remaining amounts at the expiration of the concession (see Note 8 to our audited annual consolidated financial statements). This leads to an adjustment to recognize the future increase (or decrease) in tariffs to take account of additional (or lower) costs in the current year, such adjustment being recognized as a positive (or negative) item of revenue recorded as sector financial assets or liabilities.

On November 25, 2014, ANEEL approved an amendment to distribution concession contracts. On December 10, 2014, the nine distribution subsidiaries we had at that time signed this addendum. This amendment introduced a new clause providing compensation for any outstanding balance (assets or liabilities) related to insufficient collection or reimbursement through the tariffs resulting from termination of the concession. This provision, which comes into effect once an addendum to each specific concession contract is executed, provides that the concessionaire has the unconditional right (or obligation) to receive (or deliver) cash or another financial instrument in respect of this amount. See Note 8 to our audited annual consolidated financial statements for more information.

Operating Segments

As discussed in Note 29 to our audited annual consolidated financial statements, we present our financial results in five operating segments: (i) distribution; (ii) conventional generation sources; (iii) renewable generation sources; (iv) commercialization; and (v) services.

In addition to our five operating segments above, we consolidate a number of activities known as "Other." The activities consolidated under Other consist of (i) CPFL Telecom and (ii) our holding company expenses.

The profitability of each of our segments differs. Our Distribution segment primarily reflects sales to Captive Consumers and TUSD charges paid by Free Consumers at prices determined by the regulatory authority. The volume sold varies according to external factors such as weather, income level and economic growth. This segment represented 79.9% of our net operating revenue in 2018 (compared with 78.8% in 2017), and its contribution to our net income was also larger, at 66.0% of our net income for the year, as further explained in "—Results of Operations—2018 compared to 2017—Net Income" below (by comparison, our Distribution segment accounted for 53.5% of our net income in 2017 and 46.3% in 2016).

Beginning in 2018, due to the way our new Management monitors segment results, (i) intangible assets acquired in business combination transactions that are recorded in the parent company and were previously allocated to the respective segments are now allocated to the segment "Others"; and (ii) eliminations between different segments are now classified in the "elimination" column instead of being presented in each segment. For comparison purposes, the segment information disclosed for 2017 has been restated using the same criteria. The 2016 related segment information has not been restated as the effects are immaterial.

The contributions of our Distribution, Conventional Generation, Renewable Generation, Commercialization and Services segments to the net operating revenues and net income for the years ended December 31, 2018, 2017 and 2016 are presented in the following table:

	Distribution	Conventional Generation	Renewable Generation	Commercialization	Services
2018					
Net operating revenue	79.9%	4.1%	6.9%	12.4%	1.9%
Net income	64.3%	34.5%	5.3%	2.4%	1.9%
2017					
Net operating revenue	78.8%	4.5%	7.3%	12.8%	1.8%
Net income	53.5%	52.6%	1.6%	7.3%	4.4%
2016					
Net operating revenue	78.7%	5.2%	8.8%	10.9%	2.1%
Net income	46.3%	57.4%	(16.0)%	12.8%	6.1%

Our Conventional Generation Sources segment consists in substantial part of Hydroelectric Power Plants, and our Renewable Generation Sources segment consists of wind farms, Biomass Thermoelectric Power Plants, Small Hydroelectric Power Plants and a Solar Power Plant. All of our generation sources require a high level of investment in fixed assets, and in the early years there is typically a high level of construction financing. Once these projects become operational, they generally result in a higher margin (operating income as a percentage of revenue) than the Distribution segment, but will also contribute to higher interest expenses and other financing costs. As a result, in the year ended December 31, 2018, our Renewable Generation Sources segment provided 15.5% of our operating income, but due to the significant financing costs incurred to finance these projects, the segment's contribution to net income was only 5.3%. As of December 31, 2018, 1.9% of the property, plant and equipment in our Renewable Generation Sources segment was under construction, compared to 2.6% as of December 31, 2017. In 2017, we began to report within this business the activities of our two transmission assets held through CPFL Geração, CPFL Piracicaba and CPFL Morro Agudo, both of which are operational.

Our Commercialization segment sells electricity to Free Consumers and other concessionaires or licensees.

Our Services segment offers our consumers a wide range of electricity-related services. These services are designed to help consumers improve the efficiency, cost-effectiveness and reliability of the electric equipment they use.

Our segments also purchase and sell electricity and value-added services from and to one another. In particular, our Conventional Generation Sources, Renewable Generation Sources, Commercialization and Services segments all sell electricity and provide services to our Distribution segment. Our audited annual consolidated financial statements eliminate revenues and expenses that relate to sales from one subsidiary to another within a segment, which is reflected in the column entitled "Elimination" in the table below. However, the analysis of results by segment would be inaccurate if the same elimination were carried through with respect to sales between segments. As a result, sales from one segment to another have not been eliminated in the discussion of results by segment below.

We present below selected financial information of our five reportable segments as of and for the years ended December 31, 2018, 2017 and 2016:

Distribution	Conventional Generation	Renewable Generation	Commercialization	Services	Other^(*)	Elimination	Total
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		Sources	Sources					
2018								
Net Revenue	22,457,079	661,831	1,468,254	3,491,300	58,163	-	-	28,136,627
(-)								
Inter-segment Revenues	10,238	482,548	468,065	5,152	474,646	-	(1,440,650)	-
Income from electric energy service	2,237,434	820,979	585,655	94,074	72,579	(102,255)	-	3,708,467
Financial income	574,685	75,844	131,694	46,102	5,782	(22,092)	(49,602)	762,413
Financial expense	(884,583)	(324,121)	(635,820)	(59,128)	(5,908)	(5,143)	49,602	(1,865,100)
Income before taxes	1,927,537	906,899	81,530	81,049	72,453	(129,490)	-	2,939,977
Income tax/social contribution	(495,120)	(137,089)	37,276	(27,945)	(29,529)	(121,575)	-	(773,982)
Net Income	1,432,416	769,810	118,805	53,104	42,924	(251,065)	-	2,165,995
2017⁽¹⁾								
Net Revenue	21,068,435	741,842	1,489,932	3,402,804	40,611	1,281	-	26,744,905
(-)								
Inter-segment Revenues	8,182	448,427	469,152	11,297	444,935	-	(1,381,993)	-
Income from electric energy service	1,530,833	765,990	604,596	167,724	67,598	(114,906)	(20,835)	3,021,834
Financial income	597,203	108,433	137,765	25,895	11,349	20,505	20,835	880,314
Financial expense	(1,163,689)	(437,009)	(648,571)	(58,801)	(7,101)	(73,532)	-	(2,367,868)
Income before taxes	964,347	749,805	93,789	134,818	71,846	(167,933)	-	1,846,670
Income tax/social contribution	(299,510)	(95,688)	(74,125)	(44,527)	(16,994)	(72,784)	-	(603,629)
Net Income	664,837	654,117	19,665	90,290	54,852	(240,717)	-	1,243,042
2016								
Net Revenue	15,017,166	593,775	1,334,571	2,024,350	81,595	60,633	-	19,112,089
(-)								
Inter-segment Revenues	22,526	409,338	338,357	62,757	318,770	8,661	(1,160,410)	-
Income from electric energy service	1,253,557	671,631	439,961	158,829	65,363	(66,734)	-	2,522,608
Financial income	781,365	182,574	132,653	31,513	10,742	61,655	-	1,200,503

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Financial expense	(1,331,973)	(562,196)	(667,344)	(24,761)	(5,272)	(62,432)	-(2,653,978)
Income before taxes	702,950	603,424	(94,730)	165,581	70,832	(67,510)	- 1,380,547
Income tax/social contribution	(295,748)	(98,530)	(46,311)	(53,225)	(17,019)	9,343	- (501,490)
Net Income	407,202	504,894	(141,041)	112,357	53,813	(58,167)	- 879,057

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(*) Refers to recorded assets and transactions that are not related to any of our operating segments.

(1) Beginning in 2018, due to the way our new Management monitors segment results, (i) intangible assets acquired in business combination transactions that are recorded in the parent company and were previously allocated to the respective segments are now allocated to the segment “Others”; and (ii) eliminations between different segments are now classified in the “elimination” column instead of being presented in each segment. For comparison purposes, the segment information disclosed for 2017 has been restated using the same criteria. The 2016 related segment information has not been restated as the effects are immaterial.

We also derive non-material income at the parent company level that is not related to or included in the results of our reportable segments and is reflected in the column “Other” in the table above. General expenses and indirect costs are generally allocated to the relevant segment and are reflected in the operating results of our reporting segments. Other expenses incurred by the parent company that can be directly allocated to a specific segment, are also allocated to our reporting segments.

Brazilian Economic Conditions

All of our operations are in Brazil, and we are affected by general Brazilian economic conditions. See “Item 3. Key Information—Risk Factors—Risks Relating to Brazil” for more information. In particular, the general performance of the Brazilian economy affects demand for electricity, and inflation affects our costs and our margins.

Some factors may significantly affect demand for electricity, depending on the category of consumers:

- ***Residential and Commercial Consumers.*** These segments are highly affected by weather conditions, labor market performance, income distribution and credit availability, amongst other factors. Elevated temperatures and increases in income levels cause an increased demand for electricity and, therefore, increase our sales. Conversely, rising unemployment and decreasing household income tend to reduce demand and depress our sales.

- **Industrial consumers.** Consumption for industrial consumers is related to economic growth and investments, mostly correlated to industrial production. During periods of financial crisis, this category suffers the strongest impact.

Inflation primarily affects our business by increasing operational costs and financial expenses to service our inflation-indexed debt instruments. We are able to recover a portion of these increased costs through a recovery mechanism, but there is a delay in time between when the increased costs are incurred and when the increased revenues are received following our annual tariff adjustments. The amounts owed to us under Parcel A Costs are primarily indexed to the variation of the SELIC rate until they are passed through to our tariffs and Parcel B costs are indexed to the IGP-M net of factor X (see “Item 4. Information on the Company—Basis for Calculation of Distribution Tariffs”).

Depreciation of the *real* increases the cost of servicing our foreign currency denominated debt and the cost of purchasing electricity from the Itaipu Power Plant, a Hydroelectric Facility that is one of our major suppliers and that adjusts electricity prices based in part on its U.S. dollar costs.

The following table shows the main performance indicators of Brazilian economy for the years ended December 31, 2018, 2017 and 2016:

	2018	2017	2016
Growth in GDP (in <i>reais</i>) ⁽¹⁾	1.1%	1.1%	(3.3%)
Unemployment rate - % average ⁽²⁾	12.3%	12.7%	11.5%
Credit to individuals (non-earmarked resources) - % GDP	13.8%	13.0%	12.9%
Growth in Retail Sales	2.3%	2.1%	(6.3%)
Growth (contraction) in Industrial Production	1.1%	2.5%	(6.4%)
Inflation (IGP-M) ⁽³⁾	7.5%	(0.5%)	7.2%
Inflation (IPCA) ⁽⁴⁾	3.8%	2.9%	6.3%
Average exchange rate–US\$1.00 ⁽⁵⁾	R\$3.68	R\$3.20	R\$3.48
Year-end exchange rate–US\$1.00	R\$3.87	R\$3.31	R\$3.26
Depreciation (appreciation) of the <i>real</i> vs. U.S. dollar	17.1%	1.5%	(16.5%)

Sources: *Focus Report, Instituto Brasileiro de Geografia e Estatística and the Central Bank.*

(1) Source: The Brazilian Institute for Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*, or IBGE).

(2) Unemployment rate based on the National Household Sampling Survey (*Pesquisa Nacional por Amostra de Domicílios*, or PNAD), released by IBGE.

(3) Inflation (IGP-M) is the general market price index measured by the Fundação Getúlio Vargas.

(4) Inflation (IPCA) is a broad consumer price index measured by IBGE and the reference for inflation targets set forth by the CMN.

(5) Represents the average of the commercial selling exchange rates on the last day of each month during the period.

The year 2016 in Brazil was marked by strong economic contraction with significant political crises and uncertainties, and poor economic indicators. However, in 2017, the Brazilian economy began to improve, showing recovery in principal areas of activity and financial indicators, with GDP growth of 1.1% (compared with a GDP contraction of 3.3% in 2016), according to IBGE. In 2018, the Brazilian economy continued to improve, with GDP growth of 1.1%, according to IBGE.

The recovery of household consumption as a result of a gradual acceleration of employment in 2018, coupled with the improvement in credit conditions such as the reduction of household indebtedness and interest rates, helped to boost domestic activity. According to IBGE, in 2018 household consumption increased 1.9% compared with a growth of 1.4% in 2017. The unemployment rate, income and credit statistics, which are key indicators of electricity consumption, demonstrated a significant recovery in 2017 and 2018.

Despite the growth in the Brazilian economy in 2018, our industry experienced worse results in 2018 when compared to 2017. This decline in industry results was due to a decrease in confidence following the May 2018 Brazilian trucker's strike and resulting consequences, political turbulence during the October 2018 presidential elections and a significant reduction in external demand, mainly from Argentina, one of the main buyers of Brazilian manufactured products.

In 2018, the inflation rate (IPCA) reached a historical low level (3.75% e.o.p.), which allowed for a more flexible monetary policy. As a result, the Central Bank was able to sustain continued reductions in the SELIC rate throughout the year, reaching 6.50% in April 2018.

However, despite the improvement in various macroeconomic factors in 2018, Brazil continues to experience successive downgrades of the country's credit rating: Standard & Poor's (January 2018); Fitch Ratings (August 2018); Moody's Investors Service (April 2018). These devaluations reflect continued adverse fiscal developments and continued political uncertainty in Brazil.

Our credit risk and debt securities are rated by Standard and Poor's, Fitch Ratings and Moody's Investors Service. These classifications reflect, among other factors, the outlook for the Brazilian electricity sector, the political and economic context, country risk, hydrological conditions in the areas where our plants are located, our operational performance and our level of debt. Our rating was reduced in 2016 from AA+ to AA- by Standard and Poor's as a result of the downgrading of Brazil's investment grade due to changes in economic and political scenarios, as mentioned in the paragraph above. Despite the downgrading of Brazil's investment grade in September 2015, Fitch Ratings did not reduce our rating in 2016. In May 2018, our rating was maintained as AA- with a stable outlook by Standard and Poor's. In July 2018, our rating was AA by Moody's Investors Service. In both May 2018 and February 2019, our rating was maintained as AAA with a stable outlook by Fitch Rating.

Results of Operations—2018 compared to 2017

Net Operating Revenues

Compared to the year ended December 31, 2017, our net operating revenues increased 5.2% (or R\$1,392 million) to R\$28,137 million in the year ended December 31, 2018.

This increase in operating revenue was primarily due to the combined effect of: (i) an increase of R\$1,503 million in electricity sales to final consumers, as discussed in the section “—Sales by Destination” below; (ii) an increase of R\$584 million in other concessionaires and licensees; (iii) an increase of R\$513 million in revenue due to TUSD for Captive and Free Consumers; (iv) an increase of R\$202 million in other revenues and income; and (v) an increase of R\$117 million in judicial injunctions and other tariff discounts of the CDE Account. These increases were partially offset by (i) an increase of R\$1,181 million in deductions from operating revenues, as discussed in the section “—Deductions from operating revenues” below, which represents a decrease in net operating revenues, and (ii) a decrease of R\$693 million in sector financial asset and liability.

The following discussion describes changes in our net operating revenues by destination and by segment, based on the items comprising our gross revenues.

Sales by Destination

Sales to Final Consumers

Compared to the year ended December 31, 2017, our gross operating revenues from sales to Final Consumers (which includes TUSD revenue from Captive Consumers) increased 12.9% (or R\$3,321 million) in the year ended December 31, 2018, to R\$29,021 million. Our gross operating revenues primarily reflect sales to Captive Consumers in concession areas from our distribution subsidiaries, as well as TUSD revenue from the use of our network by Captive

Consumers, both of which are subject to tariff adjustment as described below. Our gross operating revenue also reflects sales to Free Consumers in commercial and industrial categories.

Distribution companies' tariffs are adjusted every year, in percentages specific to each category of consumer. The month in which the annual tariff adjustment becomes effective varies by subsidiary, impacting both the year in which the tariff adjustment occurs as well as the following year. The adjustments for our largest subsidiaries occur in April (CPFL Paulista), June (RGE Sul) and October (CPFL Piratininga).

In the year ended December 31, 2018, overall average energy prices increased by 12.4%, mainly due to the result of the RTP for CPFL Paulista and RGE Sul and the RTA for CPFL Piratininga and CPFL Santa Cruz. In 2018, our tariff adjustments were of 21.27%, 20.01%, 18.45%, 5.71% and 12.68% for RGE, CPFL Piratininga, RGE Sul, CPFL Santa Cruz and CPFL Paulista, respectively. Furthermore, the red tariff flag was in effect for the most part of 2018. For further information, see Note 25.2 of our audited annual consolidated financial statements. Overall, average prices for Final Consumers in 2018 were higher for all consumer classes:

- **Residential and commercial consumers.** With respect to Captive Consumers (which represent 98.2% of the total amount sold to this category in our consolidated statements), average prices increased 13.2% for residential consumers and 11.8% for commercial consumers, due to the RTP described above. With respect to Free Consumers, the average price for the commercial consumers increased 5.9%.
- **Industrial consumers.** Average prices increased 11.2%, mainly due to the tariff adjustments described above. With respect to Free Consumers, the average price for industrial consumers increased 1.7% due to the tariff adjustments, which resulted from new negotiations of tariffs in contracts with Free Consumers.

The total volume of energy sold to Final Consumers in the year ended December 31, 2018 decreased 0.5% compared to the year ended December 31, 2017. This decrease represents the effect of a decrease of 1.1% (or 106 GW) in the volume of energy sold to Conventional Free Consumers, mainly due to a decrease of 413 GW in the volume of energy sold to industrial consumers offset by an increase of 261 GW in the volume of energy sold to commercial consumers and an increase of 46 GW to other consumers by our commercialization subsidiaries as a result of the migration of these consumers from the Captive to the Free Consumer categories.

The volume sold to residential and commercial categories, which accounts for 56.2% of our sales to Final Consumers, increased by 2.6% (or 496 GW) and decreased by 0.1% (or 10 GW), respectively. These changes were due to the combined effect of:

- **Residential:** an increase of 2.6% (or 496 GW) of the volume sold by our distribution subsidiaries to the residential category due to our residential consumers' greater economic strength in 2018, which was driven by the GDP growth of 1.1% in 2018 as compared to the GDP of 1.0% in 2017.
- **Commercial:** an increase of 21.24% (or 261 GW) in the volume sold by our commercialization subsidiaries due to the migration of consumers from the Captive to the Free Consumer category, which was partially offset by a decrease of (i) 43.80% (or 73 GW) in the volume of energy from renewable sources sold to commercial consumers who elected to become Special Free Consumers, and (ii) 2.24% (or 198 GW) in the volume of energy sold to Captive Consumers in the commercial category.

The volume sold to industrial consumers, which represented 26.1% of our sales to Final Consumers in 2018 (compared with 27.5% in 2017), decreased by 1.4% in the year ended December 31, 2018 compared to the year ended December 31, 2017. Volumes to Captive Consumers in this category decreased 6.2% (or 405 GW) in our distribution subsidiaries and the migration of industrial consumers from the Captive to the Free Market decreased 5.1% (or 413 GW). Regarding Free Consumers, volumes sold increased by 4.3% (or 261 GW), reflecting the same migration of industrial consumers mentioned above, as well as improvements in Brazil's economic conditions during 2018.

Sales to wholesalers

Compared to the year ended December 31, 2017, our gross operating revenues from sales to wholesalers in the year ended December 31, 2018 decreased 12.1% (or R\$734 million) to R\$5,356 million (12.6% of gross operating revenues), due mainly to a decrease of 53.7% (or R\$1,258 million) in sales of energy in the spot market, which was mainly driven by (i) a decrease of 53.3% (or 4,366 GWh) in the volume of energy sold and (ii) a decrease of 1.0% in the average price of sales to wholesalers as compared to 2017. These decreases were partially offset by an increase of 18.0% (or R\$585 million) in sales of electricity to other concessionaires and licensees. For more information on net operating revenues from our segments, see "—Sales by Segment."

Other operating revenues

Compared to the year ended December 31, 2017, our other gross operating revenues (which excludes TUSD revenue from Captive Consumers) decreased 0.7% (or R\$58 million) to R\$8,152 million in the year ended December 31, 2018 (19.1% of our gross operating revenues), mainly due to:

- (i) a decrease of R\$693 million in revenue from sector financial assets and liabilities, which posted revenue of R\$1,208 million in 2018 compared to R\$1,901 million in 2017. This revenue reflects timing differences between our budgeted costs included in the tariff at the beginning of the tariff period, and those actually incurred while such tariff is in effect, creating a contractual obligation to pay (or right to receive) cash to or from consumers through subsequent tariffs or to pay to or receive from the granting authority any remaining amounts at the expiration of the concession. This leads to an adjustment in order to recognize the future decrease (or increase) in tariffs to account for lower (or additional) costs in the current year, such adjustment being recognized as a positive (or negative) item of revenue. The decrease in this item in 2018 was driven mainly by (a) a decrease of R\$2,954 million related to electric energy cost, (b) a decrease of R\$22 million related to neutrality of sector charges; and (c) a decrease of R\$11 million related to the pass-through costs from Itaipu, partially offset by (a) an increase of R\$993 million in over-contracting, (b) an increase of R\$760 million in the CDE Account and (c) an increase of R\$744 million in the ESS and the EER. For further information, see Note 8 to our audited annual consolidated financial statements; a decrease of R\$301 million in revenue from construction of concession infrastructure;
- (ii) a decrease of R\$58 million in compensation paid for failure to comply with the limits of continuity
- (iii) (performance indicators, such as individual interruption duration per consumer unit, individual interruption frequency per consumer unit and maximum continuous interruption duration per consumer unit or connection point); an increase of R\$513 million in revenue due to TUSD relating to Free Consumers;
- (iv) an increase of R\$202 million in other revenues and income;
- (v) an increase of R\$141 million in concession financial assets adjustments;
- (vi) an increase of 8.3% (or R\$117 million) in revenue related to the low income subsidy and discounts on
- (vii) tariffs reimbursed by funds from the CDE Account; and an increase of R\$22 million in adjustment of revenues from excess demand and excess reactive power.

(viii)

Deductions from operating revenues

We deduct certain taxes and industry charges from our gross operating revenue to calculate net revenue. The ICMS tax is calculated based on gross operating revenue from final consumers (billed), while federal PIS and COFINS taxes are calculated based on total gross operating revenue. The research and development and energy efficiency programs (regulatory charges) are calculated based on net operating revenue. Other regulatory charges vary depending on the regulatory effect reflected in our tariffs. These deductions represented 34.0% of our gross operating revenue in the year ended December 31, 2018 and 33.2% in the year ended December 31, 2017. Compared to the year ended December 31, 2017, these deductions increased by 8.9% (or R\$1,181 million) to R\$14,490 million in 2018, mainly due to: (i) an increase of 9.34% (or R\$316 million) in PIS and COFINS taxes, mainly due to the increase in our gross operating revenues (the basis for calculation of these taxes); (ii) an increase of 13.43% (or R\$733 million) in ICMS taxes; and (iii) an increase of R\$831 million in contributions made to the CDE Account as a result of the new quotas established by ANEEL in 2018. These increases were partially offset by a decrease of R\$700 million in recognized

tariff flag revenues, which are required to be paid into the CCRBT administered by the CCEE.

*Sales by segment**Distribution*

Compared to the year ended December 31, 2017, net operating revenues from our Distribution segment increased 6.6% (or R\$1,391 million) to R\$22,467 million in the year ended December 31, 2018. This increase primarily reflected the increase of R\$2,542 million in gross operating revenue due to the following fluctuations:

- (i) an increase of 20.7% (or R\$2,377 million) in revenue due to TUSD for Captive and Free Consumers;
- (ii) an increase of 224.4% (or R\$202 million) in unbilled revenue;
- (iii) an increase of 8.3% (or R\$117 million) in low-income subsidy;
- (iv) an increase of R\$203 million in other revenues and income; and
- (v) an increase of R\$117 million in revenue related to discounts on tariffs reimbursed by funds from the CDE Account (see Note 25.5 to our audited annual consolidated financial statements and “—Other operating revenues” above).

These increases were partially offset by a decrease of R\$693 million in revenue from sector financial assets and liabilities, which represented a revenue of R\$1,208 million in 2018 compared with R\$1,901 million in 2017 (see “—Other operating revenues” above).

The deductions from our Distribution segments operating revenues increased by 9.1% (or R\$1,151 million) to R\$13,843 million in 2018, mainly due to: (i) an increase of 12.3% (or R\$1,017 million) in deductions related to PIS, COFINS and ICMS taxes, driven by the increase in our gross operating revenues (the basis for calculation of these taxes) and (ii) an increase of 26.1% (or R\$831 million) in contributions made to the CDE Account due to new quotas established by ANEEL in 2018 (see Note 25.4 to our audited annual consolidated financial statements). These increases were partially offset by a decrease of R\$700 million in deductions related to recognized tariff flag revenues, which are required to be paid into the CCRBT administered by the CCEE. For more information, see “—Deductions from operating revenues.”

Generation (conventional sources)

Net operating revenues from our Generation from Conventional Sources segment in the year ended December 31, 2018 amounted to R\$1,144 million, a decrease of 3.9% (or R\$46 million) compared to R\$1,190 million in the year ended December 31, 2017, due mainly to: (i) a decrease of R\$46 million of revenue from construction related to CPFL Morro Agudo; (ii) the price-driven decrease of 3.8% (R\$21 million) in revenue from sales from our facility Serra da Mesa to Furnas; (iii) an increase of 10.3% (R\$21 million) in PIS and COFINS tax deductions from revenue; and (iv) a decrease of R\$12 million in other revenues and income. These decreases were partially offset by (i) an increase of 6.5% (or R\$38 million) in other concessionaries and licensees; and (ii) an increase of R\$16 million in spot market energy.

Generation (renewable sources)

Net operating revenues from our Generation from Renewable Sources segment in the year ended December 31, 2018 amounted to R\$1,936 million, a decrease of 1.2% (or R\$23 million) compared to R\$1,959 million in the year ended December 31, 2017. This decrease was due mainly to: (i) a decrease of R\$55 million in revenue from energy sales on

the spot market; (ii) a decrease of R\$18 million in revenue from Free Consumers in the commercial sector driven mainly by Special Free Consumers migrating from the Captive Market to the Free Market and (iii) a decrease of 100% (or R\$3 million) in global reversion reserve charges (RGR) used to finance improvement and expansion projects for companies in the energy sector. These decreases were partially offset by (i) an increase of R\$53 million in revenue from other concessionaires and licensees; and (ii) an increase of 2.0% (or R\$2 million) in PIS and COFINS tax deductions from revenue.

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Commercialization

Net operating revenues from our Commercialization segment in the year ended December 31, 2018 amounted to R\$3,496 million, an increase of 2.4% (or R\$82 million) compared to R\$3,414 million in the year ended December 31, 2017. This increase was mainly due to: (i) an increase of 22.2% (or R\$343 million) in revenue from sales to other concessionaires and licensees, driven by an increase of 8.7% (or 830 GW) in sales volume; and (ii) an increase of 28.4% (or R\$73 million) in revenue from commercial Free Consumers, driven by an increase of 21.2% in sales volume. These increases were partially offset by: (i) a decrease of 68.1% (or R\$276 million) in revenue from sales in the spot market, driven by a 62.2% (or 639 GW) decrease in sales volume; (ii) a decrease of 3.5% (or R\$56 million) in revenue from industrial Free Consumers, driven by a decrease of 5.1% in sales volume; and (iii) an increase of 1.8% (or R\$8 million) in ICMS, PIS and COFINS tax deductions from operating revenues, mainly due to the increase in gross operating revenues for the segment (the basis for calculation of these taxes).

Services

Net operating revenues from our Services segment in the year ended December 31, 2018 amounted to R\$533 million, an increase of 9.7% (or R\$47 million) compared to R\$486 million in the year ended December 31, 2017. This increase was due mainly to: (i) an increase of R\$23 million in revenues from construction and maintenance services; (ii) an increase of R\$14 million in revenues from administrative and call center and information technology outsourcing; and (iii) an increase of R\$7 million in scrap sales of used equipment. These increases were partially offset by an increase of 9.4% (or R\$3 million) in PIS and COFINS tax deductions from operating revenues, mainly due to the increase in our gross operating revenues (the basis for calculation of these taxes).

*Income from Electric Energy Service by Destination**Cost of Electric Energy*

Electricity purchased for resale. Our costs for the purchase of energy for resale decreased 1.0% (or R\$151 million) in the year ended December 31, 2018, to R\$15,466 million (63.3% of our total operational costs and operating expenses) compared with R\$15,617 million for the year ended December 31, 2017 (representing 65.8% of our total operational costs and operating expenses), mainly due to a decrease of 4.7% (or 3,632 GW) in the volume of energy purchased, reflecting:

- (i) a decrease of 3.9% (or R\$566 million) in the cost of energy purchased; and
- (ii) a decrease of 5.6% (or 662 GWh) in the volume of energy purchased from Itaipu.

These decreases were partially offset by (i) an increase of R\$317 million in purchases of energy from Itaipu and an increase of 20.3% in the average prices of energy purchased from Itaipu, reflecting an increase of 4.8% in the total average price of energy purchased, itself caused by a short decrease of 3.0% in the applicable Itaipu tariff and a 5.6% decrease in the volume of energy purchased (ii) an increase of R\$37 million (or 12.8%) in the cost of energy purchased in the Proinfra Program; and (iii) a decrease of R\$60 million in PIS and COFINS tax credits (representing a decrease of 3.8% compared to 2017) related to purchases of energy, which represents an increase in the cost of energy.

Electricity network usage charges. Our charges for the use of our transmission and distribution system increased 84.7% (or R\$1,088 million) to R\$2,372 million in the year ended December 31, 2018, mainly as a result of: (i) an increase of R\$573 million in Basic Network Charges; (ii) an increase of R\$347 million in System Service Charges, net of transfers from CCEE's energy reserve account (*conta de energia de reserva – CONER*); (iii) an increase of R\$135

million in Reserve Energy Charges; and (iv) an increase of R\$106 million in transmission from Itaipu. These increases were partially offset by an increase of R\$123 million in PIS and COFINS tax credits.

Other costs and operating expenses

Our other costs and operating expenses comprise our cost of operation, services received from third parties, costs related to construction of concession infrastructure, sales expenses, general and administrative expenses and other operating expenses.

Compared to the year ended December 31, 2017, our other costs and operating expenses decreased 3.4% (or R\$232 million) to R\$6,590 million in the year ended December 31, 2018, mainly due to the following events: (i) a decrease of 14.5% (or R\$300 million) in expenses related to the construction of concession infrastructure (ii) a decrease of 4.9% (or R\$35 million) in expenses related to outsourced services; (iii) a decrease of 21.1% (or R\$24 million) in private pension plans; and (iv) a decrease of R\$20 million in impairment. These decreases were partially offset by (i) an increase of 59.5% (or R\$79 million) in gain (loss) on disposal, retirement and other noncurrent assets; (ii) an increase of 5.2% (or R\$64 million) in depreciation and amortization expenses; and (iii) an increase of 2.7% (or R\$37 million) in our personnel expenses, reflecting increased costs under our collective bargaining agreements.

Income from Electric Energy Service

Compared to the year ended December 31, 2017, our income from electric energy service increased 22.7% (or R\$687 million) to R\$3,709 million in the year ended December 31, 2018, since our net operating revenue increased by more in absolute terms (R\$1,392 million) than the increase in our cost of generating and distributing electric energy and other operational costs and expenses (R\$705 million).

*Income from Electric Energy Service by Segment**Distribution*

Compared to the year ended December 31, 2017, income from electric energy service from our Distribution segment increased R\$707 million to R\$2,237 million in the year ended December 31, 2018. As discussed above, net operating revenues from the segment increased by 6.6% (or R\$1,391 million) while costs and operational expenses related to the segment increased by 3.5% (or R\$684 million). The main contributing factors to the changes in costs and operational expenses were as follows:

Electricity costs. Compared to the year ended December 31, 2017, electricity costs increased 6.2% (or R\$876 million), to R\$15,022 million in the year ended December 31, 2018.

The cost of energy purchased for resale decreased 1.8% (or R\$231 million), reflecting: (i) a decrease of 15.5% (or R\$1,785 million) in the cost of energy purchased in the Regulated Market, (ii) a decrease of 12.8% in the volume of energy purchased, and (iii) an increase of 4.8% in average energy purchase prices. The decrease in the cost of energy purchased for resale was partially offset by (i) an increase of 703.8% (or R\$1,119 million) in the cost of purchases in the spot market, reflecting an increase of 421.9% in the volume of energy purchased and an increase of 54.4% in average purchase prices; (ii) an increase of R\$317 million in purchases of energy from Itaipu, reflecting a decrease of 5.6% in the volume of energy purchased, itself caused by a 3.0% decrease in the tariff, reflecting the net effects of an increase of 20.3% in the average price of energy purchased and a 14.5% increase in the average rate of the *real* against the U.S. dollar during 2018 as compared to 2017 (iii) an increase of 12.8% (or R\$37 million) in the Proinfa Program costs; and (iv) a decrease of 5.9% (or R\$78 million) in PIS and COFINS tax credits related to purchases of energy.

In addition, as mentioned above, charges for the use of the transmission and distribution system increased 94.1% (or R\$1,107 million) to R\$2,284 million in the year ended December 31, 2018, mainly due to: (i) an increase of R\$576

million in Basic Network Charges; (ii) an increase of R\$347 million of ESS; (iii) an increase of R\$135 million in EER; and (iv) an increase of R\$9 million in charges for use of the distribution system.

Other costs and operating expenses. Compared to the year ended December 31, 2017, our other costs and operating expenses for the Distribution segment decreased 3.5% (or R\$192 million) to R\$5,207 million in the year ended December 31, 2018. This decrease was mainly due to (i) a decrease of 12.6% (or R\$254 million) in expenses related to the construction of concession infrastructure; and (ii) a decrease of 21.4% (or R\$24 million) in private pension plans. These decreases were partially offset by (i) an increase in the third-party services expenses of 1.6% (or R\$14 million); and (ii) an increase of 8.6% (or R\$13 million) in allowance for doubtful accounts.

Generation (conventional sources)

Compared to the year ended December 31, 2017, income from electric energy service from our Conventional Generation segment increased 7.2% (or R\$55 million) to R\$821 million in the year ended December 31, 2018. This increase was mainly due to (i) an increase of 6.5% (or R\$38 million) related to sales to other concessionaries and licensees; and (ii) an increase of R\$16 million in purchases in the spot market energy. These increases were partially offset by (i) a decrease of 18.8% (R\$20 million) in PIS and COFINS tax deductions from revenue due to the increase in gross operating revenues from the segment (the basis for calculation of these taxes); (ii) a decrease of 4.5% (R\$5 million) in depreciation and amortization expenses; (iii) a decrease of 10.7% (R\$8.0 million) in personnel expenses; and (iv) a decrease of 11.5% (R\$3 million) in expenses related to outsourced services.

Generation (renewable sources)

Compared to the year ended December 31, 2017, income from electric energy service from our Renewable Generation segment decreased 3.1% (or R\$19 million) to R\$586 million in the year ended December 31, 2018. This decrease was the net effect of the decrease of 1.2% (or R\$23 million) in net operating revenue (as discussed in the section “—Sales by Segment” above); offset by the increase of R\$18 million (or 4.6%) in costs and operational expenses and a decrease of 8.0% (or R\$28 million) in costs of electric energy. The increase in operational expenses was mainly due to (i) an increase of 6.0% (or R\$15 million) in general and administrative expenses; and (ii) an increase of R\$ 3 million in depreciation and amortization expenses.

Commercialization

Compared to the year ended December 31, 2017, income from electric energy service from our Commercialization segment decreased 43.9% (or R\$74 million) to R\$94 million in the year ended December 31, 2018. This decrease was due to the net effect of the increase of 4.9% (or R\$157 million) in costs and operational expenses, which exceeded the increase of 2.4% (or R\$82 million) in net operating revenues of the segment, as discussed in the section “Sales by Segment” above. The increase in costs and expenses was mainly due to an increase of R\$173 million in the cost of energy purchased in the Regulated Market, through bilateral contracts and in the spot market, driven by an increase of 0.5% in the volume of energy purchased and 1.34% in purchase prices.

Services

Compared to the year ended December 31, 2017, income from electric energy service from our Services segment increased 7.4% (or R\$5 million) to R\$73 million in the year ended December 31, 2018. This increase was due to the net effect of the increase of 9.7% (or R\$47 million) in net operating revenues as discussed in the section “—Sales by Segment” above, which exceeded the increase of 10.1% (or R\$42 million) in costs and operational expenses.

*Net Income**Net Financial Expense*

Compared with the year ended December 31, 2017, our net financial expense decreased 25.8% (or R\$385 million), from R\$1,488 million in 2017 to R\$1,103 million in the year ended December 31, 2018, mainly due a decrease of R\$503 million in our financial expenses, offset by a decrease of R\$118 million in our financial income.

The reasons for the decrease in financial expenses are: (i) a decrease of 31.8% (or R\$172 million) in financial expenses from monetary and exchange adjustments because of lower average interest rates; (ii) a decrease of 20.0%

(or R\$332 million) in debt charges; (iii) a decrease of R\$82 million in financial expenses from monetary adjustments of sector financial liabilities; and (iv) a decrease of 43.4% (or R\$22 million) in capitalized borrowing costs, which is accounted for as a decrease in financial expenses.

The decrease in financial income is mainly due to the following reasons: (i) a decrease of 51.3% (or R\$234 million) in income from financial investments due to the reduction of the cash and cash equivalents balance; (ii) a decrease of 24.6% (or R\$12 million) in income from adjustments of escrow deposits; and (iii) a decrease of R\$5 million in adjustments of tax credits. These decreases were partially offset by (i) an increase of 100% (or R\$80 million) in income from monetary adjustments of sector financial assets (see Note 8 to our audited annual consolidated financial statements); (ii) an increase of 29.0% (or R\$25 million) in other revenues; and (iii) an increase of 4.1% (or R\$11 million) in interest and fine payments.

At December 31, 2018, we had R\$14,746 million (compared with R\$15,310 million at December 31, 2017) in debt denominated in *reais*, which accrued both interest and inflation adjustments based on a variety of Brazilian indices and money market rates. The average CDI interbank rate during the year decreased to 6.47% in 2018, compared to 10.06% in 2017; and the average TJLP (which was replaced by the TLP (Long-Term Rate) in financing contracts executed on or after January 1, 2018) decreased to 6.72% in 2018, compared to 7.12% in 2017. We also had the equivalent of R\$5,631 million (compared with R\$4,858 million at December 31, 2017) of debt denominated in foreign currency in U.S. dollars and euros. In order to reduce the exchange rate risk with respect to this foreign currency-denominated debt and variations in interest rates, we implemented a policy of using exchange and interest rate derivatives.

Income and Social Contribution Taxes

Our net charge for income and social contribution taxes increased to R\$774 million in the year ended December 31, 2018 compared with R\$604 million in the year ended December 31, 2017. Our effective rate of 26.3% on pretax income in the year ended December 31, 2018 was lower than the official rate of 34%, principally due to our ability to recognize further prior year tax loss carryforwards. Our unrecorded tax credits relate to losses generated for which it is not probable that future taxable income will be sufficient to absorb such losses (see Note 9.5 to our audited annual consolidated financial statements).

Net Income

Compared to the year ended December 31, 2017, and due to the factors discussed above, net income increased 74.2% (or R\$923 million), to R\$2,166 million in the year ended December 31, 2018.

Net Income by Segment

In the year ended December 31, 2018, 64.3% of our net income derived from our Distribution segment, 34.5% from our Generation from Conventional Sources segment, 5.3% from our Generation from Renewable Sources segment, 2.4% from our Commercialization segment, 1.9% from our Services segment and negative 8.5% from Other. See the table under “—Background—Operating Segments” earlier in this Item 5 for the equivalent contributions from our segments in 2017 and 2016.

Distribution

Compared to the year ended December 31, 2017, net income from our Distribution segment increased 115.5% (or R\$768 million), to R\$1,432 million in the year ended December 31, 2018, as a result of: (i) an increase of 46.2% (or R\$707 million) in income from electric energy service; and (ii) a decrease of 45.3% (or R\$257 million) in net financial expense; partially offset by an increase of 65.3% (or R\$196 million) in income and social contribution taxes expenses.

The decrease in the segment’s net financial expense was mainly due to:

- (i) a decrease of 24.0% (or R\$279 million) in financial expenses, mainly due to: (a) a decrease of R\$580 million in derivatives expenses; (b) a decrease of R\$41 million in financial expenses from debt charges as a result of lower indebtedness; and (c) an increase of R\$469 million in expenses from monetary and exchange rate variations; and
- (ii) a decrease of R\$23 million in financial income, mainly due to: (a) a decrease of 66.0% (or R\$144 million) in income from financial investments; and (b) a decrease of 26.6% (or R\$13 million) in income from

interest of escrow deposits.

These decreases were partially offset by: (i) an increase of 100% (or R\$163 million) in income from the adjustment of sector financial assets and liabilities (see Note 8 to our audited annual consolidated financial statements); (ii) an increase of 72.5% (or R\$29 million) in income from monetary and exchange rate variations; (iii) an increase of 112.5% (or R\$18 million) in discounts on the purchase of ICMS credit; and (iv) an increase of 4.3% (or R\$11 million) in interests and fines.

Generation (conventional sources)

Net income from our Generation from Conventional Sources segment increased by 17.7% (or R\$116 million), to R\$770 million during the year ended December 31, 2018 from R\$654 million for the year ended December 31, 2017. This increase was mainly due to: (i) an increase of 7.2% (or R\$55 million) in income from electric energy service; and (ii) a decrease of 24.4% (or R\$80 million) in net financial expense.

The decrease in net financial expense was due mainly to: (i) a decrease of R\$214 million of expenses from derivatives; and (ii) a decrease of 29.4% (or R\$104 million) in interest on debts. These decreases were partially offset by: (i) an increase of R\$163 million in monetary and exchange rate variation expenses; and (ii) a decrease of 50.6% (or R\$41 million) in income from financial investments.

Generation (renewable sources)

The net income from our Generation from Renewable Sources segment increased by 504.2% (or R\$99 million), to R\$119 million in the year ended December 31, 2018 compared to net income of R\$20 million in 2017, mainly due to the combined effect of: (i) a decrease of R\$111 million in income tax and social contribution tax expenses, (ii) the decrease of 3.1% (or R\$19 million) in income from electric energy service; and (iii) a decrease of 1.3% (or R\$7 million) in net financial expense.

The decrease in net financial expense was driven by (i) a decrease of R\$109 million in debt expenses and monetary and exchange rate variation expenses; (ii) a decrease of R\$19 million in capitalized borrowing costs, which is accounted for as a decrease in financial expenses; and (iii) an increase of R\$26 million in other financial revenue from CCEE financial settlements, offset by (i) an increase of R\$78 million in other financial expenses; and (ii) a decrease of R\$33 million in income from financial investments.

Commercialization

Compared to the year ended December 31, 2017, net income from our Commercialization segment decreased 41.2% (or R\$37 million), to R\$53 million in the year ended December 31, 2018, reflecting the combined effect of: (i) a decrease of R\$20 million in net financial income, mainly related to the impact in monetary and exchange rate variations and derivatives; and (ii) a decrease of R\$17 million in income and social contribution tax expenses.

Services

Compared to the year ended December 31, 2017, net income from our Services segment decreased 21.7% (or R\$12 million), to R\$43 million in the year ended December 31, 2018, reflecting the combined effects of: (i) an increase of R\$20 million in personnel and third party services; (ii) a decrease of R\$4 million of net financial income; (iii) a decrease of R\$13 million in income and social contribution tax expenses; and (iv) an increase of 7.4% (or R\$5 million) in the income from electric energy service.

Results of Operations—2017 compared to 2016

Net Operating Revenues

Compared to the year ended December 31, 2016, our net operating revenues increased 39.9% (or R\$7,633 million) to R\$26,745 million in the year ended December 31, 2017.

This increase in operating revenue was primarily due to the combined effect of: (i) a positive variation of R\$3,996 million in the sector financial assets and liabilities, as discussed in the section “Other Operating Revenue” below; (ii) an increase of R\$1,699 million in energy sales in the spot market, as discussed in the section “Sales by Destination” below; (iii) an increase of R\$1,430 million in electricity sales to final consumers, as discussed in the section “Sales by Destination” below; and (iv) an increase of R\$869 million in other concessionaires and licensees, partially offset by an increase of R\$1,637 million in deductions from operating revenues, discussed in the section “Deductions from operating revenues” below.

The following discussion describes changes in our net operating revenues by destination and by segment, based on the items comprising our gross revenues.

Sales by Destination

Sales to Final Consumers

Compared to the year ended December 31, 2016, our gross operating revenues from sales to Final Consumers (which includes TUSD revenue from Captive Consumers) increased 7.5% (or R\$1,788 million) in the year ended December 31, 2017, to R\$25,787 million. Our gross operating revenues primarily reflect sales to Captive Consumers in concession areas from our distribution subsidiaries, as well as TUSD revenue from the use of our network by Captive Consumers, both of which are subject to tariff adjustment as described below. Our gross operating revenue also reflects sales to Free Consumers in commercial and industrial categories.

Distribution companies' tariffs are adjusted every year, in percentages specific to each category of consumer. The month in which the annual tariff adjustment becomes effective varies, impacting both the year in which the tariff adjustment occurs as well as the following year. The adjustments for our largest subsidiaries occur in April (CPFL Paulista), June (RGE Sul) and October (CPFL Piratininga).

In the year ended December 31, 2017, overall average energy prices decreased by 6.2%, mainly due to the negative tariff adjustment of 10.50% for CPFL Paulista, the negative tariff adjustment of 6.43% for RGE Sul, the positive tariff adjustment of 5.00% for RGE and the positive tariff adjustment of 17.28% for CPFL Piratininga. As a result, although the red tariff rate was in effect for the majority of 2017, when compared to 2016, the effects of tariff adjustments (RTA or RTP, since there is no annual adjustment in the year of periodic revisions) exceeded the other tariff effects. See Note 25.2 to our audited annual consolidated financial statements for more information. Overall average prices for Final Consumers in 2017 were higher for all consumer classes:

- ***Residential and commercial consumers.*** With respect to Captive Consumers (which represent 95.3% of the total amount sold to this category in our consolidated statements), average prices decreased 5.3% for residential consumers and 3.6% for commercial consumers, due to the annual tariff adjustment described above. With respect to Free Consumers, the average price for the commercial consumers decreased 25.7%.
- ***Industrial consumers.*** Average prices decreased 5.6%, mainly due to the tariff adjustments described above. With respect to Free Consumers, the average price for industrial consumers decreased 31.4%. The decrease in the average price for the industrial consumers was due to the tariff applied to the contracts governing the use of our TUSD by Free Consumers, which resulted from the annual tariff adjustment.

The total volume of energy sold to Final Consumers in the year ended December 31, 2017 increased 14.6% compared to the year ended December 31, 2016. This increase represents the effect of an increase of 86% (or 4,427 GW) in the volume of energy sold to Conventional Free Consumers (driven by increases of (i) 3,512 GW to industrial, (ii) 725 GW to commercial consumers and (iii) 190 GW to other consumers by our commercialization subsidiaries as a result of the migration of these consumers from Captive to the Free Consumer category) and the inclusion of RGE Sul's distribution operations in our consolidated results for the full year in 2017, which led to an increase of 5,563 GW (compared to RGE Sul's 1,141 GW contribution during the last two months of 2016).

The volume sold to residential and commercial categories, which accounts for 66.6% for our sales to Final Consumers, increased by 16.1% (or 2,649 GW) and 5.2% (or 501 GW), respectively. These increases were due to the combined effect of:

- **Residential:** (i) the inclusion of RGE Sul’s distribution operations in our consolidated results for the full year in 2017 (compared to inclusion in only the last two months of 2016), which led to an increase of 2,230 GW sold to residential consumers, compared to 426 GW in 2016; and (ii) an increase of 2.6% of the volume sold by our distribution subsidiaries (excluding RGE Sul) to the residential category; due to our residential consumers’ greater economic strength in 2017, driven by the GDP growth of 1.0% in 2017 compared to the GDP contraction of 3.5% in 2016.
- **Commercial:** (i) an increase of 142 GW in the volume of energy sold to Captive Consumers in the commercial category; and (ii) an increase of 617 GW in the volume sold by our commercialization subsidiaries due to the migration of consumers from Captive to the Free Consumer category. This increase was partially offset by a reduction of 60.9% (or 258 GW) in the volume of energy from renewable sources sold to commercial consumers who elected to become Special Free Consumers, whose contracted energy demand is between 500 kV and 3 MW, and who are allowed to purchase energy only from renewable sources.

The volume sold to industrial consumers, which represented 19.8% of our sales to Final Consumers in 2017 (compared with 22.0% in 2016), decreased by 2.2% in the year ended December 31, 2017 compared to the year ended December 31, 2016. Volumes to Captive Consumers in this category decreased 6.6%, which represents the net effect of a decrease of 463 GW related to our distribution subsidiaries and the increase in migration of industrial consumers from the Captive to the Free Market. Regarding Free Consumers, volumes sold increased by 5.1% (or 725 GW), reflecting the same migration of consumers, as well as improvements in Brazilian economic conditions during 2017.

Sales to wholesalers

Compared to the year ended December 31, 2016, our gross operating revenues from sales to wholesalers in the year ended December 31, 2017 increased 74.2% (or R\$2,594 million) to R\$6,090 million (15.2% of gross operating revenues), due mainly to (i) an increase of 264.7% (or R\$1,699 million) in sales of energy in the spot market (mainly driven by higher average prices); and (ii) an increase of 36.7% (or R\$869 million) in sales of electricity to other concessionaires and licensees. These increases reflect the combined effect of an increase of 28.4% in energy volumes sold and an increase of 35.7% in the average price of sales to wholesalers compared to 2016. See “—Sales by Segment” below for more information on net operating revenues from our segments.

Other operating revenues

Compared to the year ended December 31, 2016, our other gross operating revenues (which excludes TUSD revenue from Captive Consumers) increased 157.4% (or R\$5,021 million) to R\$8,210 million in the year ended December 31, 2017 (20.5% of our gross operating revenues), mainly due to:

- (i) a positive variation of R\$3,996 million in revenue from sector financial assets and liabilities, which posted revenue of R\$1,901 million in 2017 compared with an expense of R\$2,095 million in 2016. This revenue reflects timing differences between our budgeted costs included in the tariff at the beginning of the tariff period, and those actually incurred while such tariff it is in effect, creating a contractual right to pay (or receive) cash to or from consumers through subsequent tariffs or to pay to (or receive from) the granting authority any remaining amounts at the expiration of the concession. This leads to an adjustment in order to recognize the future decrease (or increase) in tariffs to take account of lower (or additional) costs in the current year, such adjustment being recognized as a positive (or negative) item of revenue. The increase in this item in 2017 was driven mainly by (i) an increase of R\$2,869 million related to electric energy cost, (ii) an increase of R\$1,490 million related to the pass-through from Itaipu and (iii) an increase of R\$610 million in contributions to the ESS and EER. For further information, see Note 8 to our audited annual

consolidated financial statements for more information;
an increase of R\$719 million in revenue from construction of concession infrastructure; and

- (ii)
- (iii) the increase of 12.1% (or R\$153 million) in revenue related to the low income subsidy and discounts on tariffs reimbursed by funds from the CDE Account.

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Deductions from operating revenues

We deduct certain taxes and industry charges from our gross operating revenue to calculate net revenue. The ICMS tax is calculated based on gross operating revenue from final consumers (billed), while federal PIS and COFINS taxes are calculated based on total gross operating revenue. The research and development and energy efficiency programs (regulatory charges) are calculated based on net operating revenue. Other regulatory charges vary depending on the regulatory effect reflected in our tariffs. These deductions represented 33.2% of our gross operating revenue in the year ended December 31, 2017 and 37.9% in the year ended December 31, 2016. Compared to the year ended December 31, 2016, these deductions increased by 14.0% (or R\$1,637 million) to R\$13,309 million in 2017, mainly due to: (i) an increase of 27.9% (or R\$736 million) in PIS and COFINS taxes, mainly due to the increase in our gross operating revenues (the basis for calculation of these taxes); (ii) an increase of 10.55% (or R\$521 million) in ICMS taxes; (iii) an increase of R\$448 million in tariff flag revenues recognized, which are required to be paid into the CCRBT administered by the CCEE; and (iv) a decrease of R\$175 million in contributions made to the CDE Account as a result of the new quotas defined by ANEEL in 2017.

*Sales by segment**Distribution*

Compared to the year ended December 31, 2016, net operating revenues from our Distribution segment increased 40.1% (or R\$6,037 million) to R\$21,077 million in the year ended December 31, 2017. This increase primarily reflected the increase of R\$7,496 million in gross operating revenue, due to the following fluctuations:

- (i) a positive variation of R\$3,996 million in revenue from sector financial assets and liabilities, which represented a revenue of R\$1,901 million in 2017 compared with an expense of R\$2,095 million in 2016 (see “—Other operating revenues” above);
- (ii) an increase of R\$1,215 million in electricity sales to wholesalers, driven by significant increases in the energy prices we were able to obtain on the spot market;
- (iii) an increase of R\$722 million in revenue from construction of concession infrastructure; and
- (iv) the increase of 12.1% (or R\$153 million) in revenue related to the low income subsidy and discounts on tariffs reimbursed by funds from the CDE Account (see Note 25.5 to our audited annual consolidated financial statements and “—Other operating revenues” above).

The deductions from our Distribution segments operating revenues increased by 13% (or R\$1,460 million) to R\$12,692 million in 2017, mainly due to: (i) an increase of 15.1% (or R\$1,084 million) in deductions related to PIS, COFINS and ICMS taxes, driven by the increase in our gross operating revenues (the basis for calculation for these taxes); (ii) an increase of R\$448 million in deductions related to tariff flag revenues recognized, which are required to be paid into the Tariff Flag Resources Centralizing Account administered by the CCEE; and (iii) a decrease of 5.2% (or R\$175 million) in contributions made to the CDE Account due to new quotas defined by ANEEL in 2017 (see Note 25.4 to our audited annual consolidated financial statements for more information). See “—Deductions from operating revenues” for more information.

Generation (conventional sources)

Net operating revenues from our Generation from Conventional Sources segment in the year ended December 31, 2017 amounted to R\$1,190 million, an increase of 18.6% (or R\$187 million) compared to R\$1,003 million in the year ended December 31, 2016, due mainly to (i) an increase of R\$72 million in other revenues and income; (ii) an increase of R\$47 million of revenue from construction related to CPFL Morro Agudo; (iii) an increase of 6.6% (R\$36

million) in revenue from sales to our distribution subsidiaries; (iv) the price-driven increase of 6.0% (R\$32 million) in revenue from sales from our facility Serra da Mesa to Furnas; and (v) an increase of 183.3% (or R\$11 million) in spot market energy. This increase was partially offset by an increase of 9.6% (R\$9 million) in PIS and COFINS tax deductions from revenue due to the increase in gross operating revenues from the segment (the basis for calculation for these taxes).

Generation (renewable sources)

Net operating revenues from our Generation from Renewable Sources segment in the year ended December 31, 2017 amounted to R\$1,959 million, an increase of 17.1% (or R\$286 million) compared to R\$1,673 million in the year ended December 31, 2016. This increase was due mainly to: (i) an increase of R\$210 million in revenue from Other concessionaires and licensees, driven by new volumes; and (ii) an increase of R\$148 million in revenue from energy sales on the spot market. These increases were partially offset by a decrease of 60.9% (or R\$58 million) in revenue from Free Consumers in the Commercial sector, driven principally from Special Free Consumers migrating from the Captive Market and an increase of 7.5% (or R\$7 million) in PIS and COFINS tax deductions from revenue.

Commercialization

Net operating revenues from our Commercialization segment in the year ended December 31, 2017 amounted to R\$3,414 million, an increase of 63.6% (or R\$1,327 million) compared to R\$2,087 million in the year ended December 31, 2016. This increase was mainly due to: (i) an increase of 102.5% (or R\$782 million) in revenue from sales to Other concessionaires and licensees, driven by a 76.2% (or R\$4,121 million) increase in volume; (ii) an increase of 598.3% (or R\$347 million) in revenue from sales in the spot market, driven by a 130.6% (or R\$582 million) increase in volume; (iii) an increase of 21.3% (or R\$281 million) in revenue from Industrial Free Consumers, driven by an increase of 38.9% in volumes; and (iv) an increase of 81.5% (or R\$116 million) in revenue from commercial Free Consumers, driven by an increase of 101.3% in volumes. These increases were partially offset by: (i) an increase of 63.6% (or R\$136 million) in PIS and COFINS tax deductions from operating revenues, mainly due to the increase in gross operating revenues for the segment (the basis for calculation for these taxes); (ii) a decrease of 91.8% (or R\$56 million) in other revenues and income; and (iii) a decrease of 100% (or R\$12 million) of Electricity sales to Furnas (Wholesalers).

Services

Net operating revenues from our Services segment in the year ended December 31, 2017 amounted to R\$486 million, an increase of 21.3% (or R\$85 million) compared to R\$400 million in the year ended December 31, 2016. This increase was mainly due to: (i) an increase of R\$98 million in revenues from construction and maintenance services; (ii) an increase of R\$21 million in revenues from administrative, call center and information technology outsourcing. These increases were partially offset by: (i) a decrease of 23.5% (R\$25 million) in revenue from our self-generation energy efficiency business; and (ii) an increase of 30.6% (or R\$11 million) in PIS, COFINS and ISS tax deductions from operating revenues, mainly due to the increase in our gross operating revenues (the basis for calculation for these taxes).

*Income from Electric Energy Service by Destination**Cost of Electric Energy*

Electricity purchased for resale. Our costs for the purchase of energy for resale increased 58.6% (or R\$5,768 million) in the year ended December 31, 2017, to R\$15,617 million (65.8% of our total operational costs and operating expenses) compared with R\$9,849 million for the year ended December 31, 2016 (representing 59.4% of our total operational costs and operating expenses), mainly due to an increase of 30.1% in average prices, reflecting:

- (i) an increase of 67.1% (or R\$5,728 million) in the cost of energy purchased, reflecting an increase of 22.2% in the volume of energy purchased and a 36.7% increase in average purchase prices;

- (ii) an increase of R\$325 million in purchases of energy from Itaipu, reflecting an increase of 3.4% in the average price of energy purchased (in *reais*), itself caused by a 11.4% increase in the tariff (which is established on an annual basis by ANEEL in US\$/kW), 8.3% depreciation in the average rate of the *real* against the U.S. dollar during 2017 compared with 2016 and a 12.2% increase in the volume of energy purchased; and
- (iii) an increase of 107.6% (or R\$290 million) in cost of energy purchased in the spot market, driven mainly by an increase of 59.6% in volume purchased.

These increases were partially offset by an additional R\$575 million in PIS and COFINS tax credits (representing an increase of 58.2% compared to 2016) related to purchases of energy, which represents a decrease in the cost of energy.

Electricity network usage charges. Our charges for the use of our transmission and distribution system decreased 5.0% (or R\$67 million) to R\$1,284 million in the year ended December 31, 2017, mainly as a result of: (i) a decrease of R\$816 million of System Service Charges; and (ii) a decrease of R\$107 million in EER. These decreases were partially offset by: (i) an increase of R\$707 million in Basic Network Charges; (ii) an increase of R\$107 million in transmission from Itaipu charges; and (iii) an increase of R\$38 million in connection charges.

Other costs and operating expenses

Our other costs and operating expenses comprise our cost of operation, services rendered to third parties, costs related to construction of concession infrastructure, sales expenses, general and administrative expenses and other operating expenses.

Compared to the year ended December 31, 2016, our other costs and operating expenses increased 26.6% (or R\$1,432 million) to R\$6,822 million in the year ended December 31, 2017, mainly due to the following events: (i) an increase of 53.2% (or R\$719 million) in expenses related to the construction of concession infrastructure; (ii) an increase of 25.9% (or R\$283 million) in our personnel expenses, reflecting increased costs under our collective bargaining agreements; (iii) an increase of 19.9% (or R\$207 million) in depreciation and amortization expenses; (iv) an increase of 11.7% (or R\$76 million) in expenses related to outsourced services; (v) an increase of 31.6% (or R\$60 million) in inventory consumption; (vi) an increase of R\$49 million in expenses related to disposal of assets; and (vii) a decrease of 12.1% (or R\$21 million) in allowance for doubtful accounts.

Income from Electric Energy Service

Compared to the year ended December 31, 2016, our income from electric energy service increased 19.8% (or R\$499 million) to R\$3,022 million in the year ended December 31, 2017, since our net operating revenue increased by more in absolute terms (R\$7,633 million) than the increase in our cost of generating and distributing electric energy and other operational costs and expenses (R\$7,134 million).

Income from Electric Energy Service by Segment

Distribution

Compared to the year ended December 31, 2016, income from electric energy service from our Distribution segment increased R\$277 million to R\$1,531 million in the year ended December 31, 2017. As discussed above, net operating revenues from the segment increased by R\$6,037 million while costs and operational expenses related to the segment increased by R\$5,647 million. The main contributing factors to the changes in costs and operational expenses were as follows:

Electricity costs. Compared to the year ended December 31, 2016, electricity costs increased 45.1% (or R\$4,399 million), to R\$14,147 million in the year ended December 31, 2017.

The cost of energy purchased for resale increased 52.6% (or R\$4,473 million), reflecting: (i) an increase of 61.3% (or R\$4,365 million) in the cost of energy purchased in the Regulated Market, reflecting an increase of 9.8% in the volume of energy purchased and an increase of 46.9% in average purchase prices; (ii) an increase of R\$325 million in purchases of energy from Itaipu, reflecting an increase of 3.4% in the average price of energy purchased (in *reais*),

itself caused by a 11.4% increase in the tariff (which is established on an annual basis by ANEEL in US\$/kW) and 8.3% depreciation in the average rate of the *real* against the U.S. dollar during 2017 compared with 2016, offset by a 12.2% increase in the volume of energy purchased; and (iii) an increase of 109% (or R\$236 million) in PROINFA and spot market costs. This increase in the cost of energy purchased for resale was partially offset by an increase of 52.3% (or R\$452 million) in PIS and COFINS tax credits related to purchases of energy.

In addition, as mentioned above, charges for the use of the transmission and distribution system decreased 5.9% (or R\$75 million) to R\$1,177 million in the year ended December 31, 2017, mainly as a result of: (i) a decrease of R\$816 million of System Service Charges; and (ii) a decrease of R\$107 million in Reserve Energy Charges. These decreases in charges were partially offset by (i) an increase of R\$702 million in Basic Network Charges; and (ii) an increase of R\$30 million in connection charges.

Other costs and operating expenses. Compared to the year ended December 31, 2016, our other costs and operating expenses for the Distribution segment increased 36.2% (or R\$1,248 million), to R\$4,695 million in the year ended December 31, 2017, mainly due to (i) an increase of 55.3% (or R\$722 million) in expenses related to the construction of concession infrastructure; (ii) an increase of 29.7% (or R\$195 million) in expenses related to outsourced services; (iii) an increase of 26.3% (or R\$192 million) in our personnel expenses principally due to the acquisition of RGE Sul as well as salary increases under our collective bargaining agreement; and (iv) an increase of 28.7% (or R\$144 million) in depreciation and amortization expenses. These increases were partially offset by a decrease of 8.4% (or R\$15 million) in allowance for doubtful accounts.

Generation (conventional sources)

Compared to the year ended December 31, 2016, income from electric energy service from our Conventional Generation segment increased 14.0% (or R\$94 million) to R\$766 million for the year ended December 31, 2017. This increase was mainly due to an increase of 18.6% (or R\$187 million) in net operating revenue as discussed in the section “Sales by Segment” above, partially offset by an increase of 47.0% (or R\$50 million) in costs and operational expenses.

The increase in costs and operational expenses was mainly due to (i) an increase of 100% (or R\$45 million) in expenses related to the construction of concession infrastructure; (ii) an increase of 23.8% (or R\$5 million) in expenses related to outsourced services; and (iii) an increase of R\$49 million in the cost of electric energy driven by a 19.3% increase in volume and a 35.9% increase in average prices, which was the result of our strategy in 2017 to acquire energy in the short-term market in order to minimize the impacts of the GSF and PLD increases resulting from the lack of rainfall and the consequent reduction in hydropower generation and increase in thermal generation. In 2017, the recognition of expense related to amortization of GSF costs was of R\$7 million.

Generation (renewable sources)

Compared to the year ended December 31, 2016, income from electric energy service from our Renewable Generation segment increased 37.4% (or R\$165 million) to R\$605 million for the year ended December 31, 2017. This increase was mainly due to the increase of 17.1% (or R\$286 million) in net operating revenue (as discussed in the section “Sales by Segment” above) partially offset by the increase of 8.5% (or R\$58 million) in costs of electric energy and operational expenses.

The increase in costs and operational expenses mainly reflects: (i) an increase of 15.2% (or R\$61 million) in depreciation and amortization expenses related to the entry into operation of Pedra Cheirosa; (ii) an increase of R\$16 million in purchases of operating materials and equipment; and (iii) an increase of R\$12 million in expenses for outsourced services. These increases in costs were partially offset by a decrease of (i) R\$20 million in expenses related to impairment provisions; and (ii) an increase of 11.1% (or R\$10 million) in charges for use of the transmission and distribution system.

Commercialization

Compared to the year ended December 31, 2016, income from electric energy service from our Commercialization segment increased 5.6% (or R\$9 million), to R\$168 million in the year ended December 31, 2017. This increase was due to the net effect of the increase of 63.6% (or R\$1,327 million) in net operating revenues of the segment, as discussed in the section “Sales by Segment” above, which exceeded the increase of 68.5% (or R\$1,319 million) in costs of electric energy and operational expenses. The increase in costs and expenses was mainly due to an increase of 70.3% (or R\$1,318 million) in the cost of energy purchased in the Regulated Market, driven by an increase of 62.2% in the volume of energy purchased partially offset by lower purchase prices.

Services

Compared to the year ended December 31, 2016, income from electric energy service from our Services segment increased 3.4% (or R\$2 million), to R\$68 million in the year ended December 31, 2017. This increase was due to the net effect of the increase of 21.3% (or R\$85 million) in net operating revenues as discussed in the section “Sales by Segment” above, which exceeded the increase of 23.6% (or R\$76 million) in costs and operational expenses.

*Net Income**Net Financial Expense*

Compared with the year ended December 31, 2016, our net financial expense increased 2.3% (or R\$34 million), from R\$1,453 million in 2016 to R\$1,488 million in the year ended December 31, 2017, mainly due a decrease of R\$286 million in our financial expenses, more than offset by a decrease of R\$320 million in our financial income.

The reasons for the decrease in financial expenses are: (i) a decrease of 23.2% (or R\$163 million) in financial expenses from monetary and exchange adjustments, because of lower average interest rates; and (ii) a decrease of 8.3% (or R\$150 million) in debt charges. These decreases in financial expenses were partially offset by (i) an increase of R\$57 million in financial expenses from monetary adjustments of sector financial liabilities; and (ii) a decrease of 25.8% (or R\$18 million) in capitalized borrowing costs, which is accounted for as a decrease in financial expenses.

The decrease in financial income is mainly due to following reasons: (i) a decrease of 31.5% (or R\$210 million) in income from financial investments, due to the reduction of the cash and cash equivalents balances; (ii) a decrease of 58.7% (or R\$87 million) in income from monetary and exchange adjustments; (iii) a reduction of 100% (or R\$33 million) in income from adjustment of sector financial assets and liabilities (see Note 8 to our audited annual consolidated financial statements); and (iv) a decrease of R\$13 million in adjustments of tax credits. These decreases were partially offset by: (i) an increase of 7.9% (or R\$19 million) in interest and fine payments; (ii) an increase of 23.6% (or R\$15 million) in PIS and COFINS on other finance income; and (iii) an increase of 42.9% (or R\$14 million) in income from adjustments of escrow deposits.

At December 31, 2017, we had R\$15,310 million (compared with R\$16,452 million at December 31, 2016) in debt denominated in *reais*, which accrued both interest and inflation adjustments based on a variety of Brazilian indices and money market rates. The average CDI interbank rate during the year decreased to 9.93% in 2017, compared to 14% in 2016; and the average TJLP decreased to 7.1% in 2017, compared to 7.5% in 2016. We also had the equivalent of R\$4,858 million (compared with R\$5,502 million at December 31, 2016) of debt denominated in foreign currency in U.S. dollars and euros. In order to reduce the exchange rate risk with respect to this foreign currency-denominated debt and variations in interest rates, we implement a policy of using exchange and interest rate derivatives.

Income and Social Contribution Taxes

Our net charge for income and social contribution taxes increased to R\$604 million in the year ended December 31, 2017 compared with R\$501 million in the year ended December 31, 2016. Our effective rate of 32.7% on pretax income in the year ended December 31, 2017 was lower than the official rate of 34%, principally due to the ability to recognize further prior year tax loss carryforwards. Our unrecorded tax credits relate to losses generated for which there is no currently reasonable certainty that future taxable income will be sufficient to absorb such losses (see Note 9.6 to our audited annual consolidated financial statements).

Net Income

Compared to the year ended December 31, 2016, and due to the factors discussed above, net income increased 41.4% (or R\$364 million), to R\$1,243 million in the year ended December 31, 2017.

Net Income by Segment

In the year ended December 31, 2017, 53.5% of our net income derived from our Distribution segment, 52.6% from our Generation from Conventional Sources segment, 1.6% from our Generation from Renewable Sources segment, 7.3% from our Commercialization segment, 4.4% from our Services segment and negative 19.4% from Other. See the table under “Background—Operating Segments” earlier in this Item 5 for the equivalent contribution from our segments in 2016 and 2015.

Distribution

Compared to the year ended December 31, 2016, net income from our Distribution segment increased 63.3%, (or R\$258 million), to R\$665 million in the year ended December 31, 2017, as a result of: (i) an increase of 22.1% (or R\$277 million) in income from electric energy service; offset by (ii) an increase of 2.9% (or R\$16 million) in net financial expense; and (iii) an increase of 1.3% (or R\$4 million) in income and social contribution taxes expenses.

The increase in the segment’s net financial expense was mainly due to:

- a decrease of 12.6% (or R\$168 million) in financial expenses, mainly due to: (i) a decrease of R\$1,302 million in derivatives expenses; (ii) an increase of R\$1,225 million in monetary and exchange rate variations; and (iii) a decrease of R\$67 million in financial expenses from debt charges as a result of lower indebtedness;
- a decrease of R\$184 million in financial income, mainly due to: (i) a decrease of 41.2% (or R\$153 million) in income from financial investments; (ii) a decrease of 48.7% (or R\$38 million) in monetary and exchange rate variations; and (iii) a decrease of 100% (or R\$33 million) in income from the adjustment of sector financial assets and liabilities (see Note 8 to our audited annual consolidated financial statements). These decreases were partially offset by: (i) an increase of 10.1% (or R\$24 million) in arrears of interest and fines; and (ii) an increase of 44.1% (or R\$15 million) in income from interest of escrow deposits.

Generation (conventional sources)

Net income from our Generation from Conventional Sources segment increased by 29.6% (or R\$149 million) to R\$654 million during the year ended December 31, 2017 from R\$505 million for the year ended December 31, 2016. This increase is mainly due to: (i) the increase of 14.0% (or R\$94 million) in income from electric energy service; and (ii) a decrease of 13.4% (or R\$51 million) in net financial expense.

The decrease in net financial expense was due mainly to: (i) a decrease of 72.1% (or R\$49 million) in positive monetary and exchange variations, both classified in financial income; and (ii) a decrease of 22.1% (or R\$23 million) in income from financial investments. These decreases were partially offset by (i) a decrease of R\$107 million in derivatives expenses; and (ii) a decrease of R\$23 million in debt charges and negative monetary and exchange variations, driven by lower average interest rates.

Generation (renewable sources)

The net income from our Generation from Renewable Sources segment increased by 113.9% (or R\$161 million) to R\$20 million in the year ended December 31, 2017 compared to net loss of R\$141 million in 2016, mainly due to the combined effect of: (i) the increase of 37.4% (or R\$165 million) in income from electric energy service, (ii) an increase of R\$28 million in income and social contribution taxes expenses; and (iii) a decrease of 4.5% (or R\$24 million) in net financial expense.

The increase in net financial expense was driven by a decrease of R\$45 million in debt expenses and monetary and exchange rate variations, offset by an increase of R\$25 million in capitalized borrowing costs, which is accounted for as a decrease in financial expenses.

Commercialization

Compared to the year ended December 31, 2016, net income from our Commercialization segment decreased 19.6% (or R\$22 million), to R\$90 million in the year ended December 31, 2017, reflecting the combined effect of: (i) a decrease of R\$40 million in net financial income related to the impact for the entire year of debentures issued in late 2016 in connection with the acquisition of RGE Sul; (ii) an increase of 5.6% (or R\$9 million) in the income from electric energy service; and (iii) a decrease of R\$9 million in income and social contribution taxes expenses.

Services

Compared to the year ended December 31, 2016, net income from our Services segment increased 1.9% (or R\$1 million), to R\$55 million in the year ended December 31, 2017. This relatively stable number reflects the combined effect of: (i) an increase of 3.4% (or R\$2 million) in the income from electric energy service; and (ii) a slight decrease of R\$1 million of net financial income.

Liquidity and Capital Resources

Our credit risk and debt securities are rated by Standard and Poor's, Fitch Ratings and Moody's. These ratings reflect, among other factors, perspectives for the Brazilian electricity sector, the political and economic context, country risk, hydrological conditions in the areas where our power plants are located, our operational performance and debt levels, and the ratings and outlook of our controlling shareholders.

On December 31, 2018, our working capital was positive, reflecting an excess of current assets over current liabilities of R\$987 million, an increase of R\$2,785 million compared to a negative working capital balance of R\$1,797 million at December 31, 2017. The main causes of this increase in working capital were:

- (i) a decrease of R\$1,929 million in our short term debt balance, which includes loans and financing, debentures and related accrued interest;
- (ii) an increase of R\$1,160 million in our net sector financial assets and liabilities balance, from an assets position of R\$171 million in 2017 to R\$1,331 million in 2018;
- (iii) a decrease of R\$899 million in our trade payables balance;
- (iv) a decrease of R\$431 million in our regulatory charges payable balance; and
- (v) an increase of R\$247 million in our consumers receivables balance.

These factors were partially offset by (i) a decrease of R\$1,358 million in our cash and cash and equivalents balance, due to net cash generation of R\$857 million in operating activities, offset by cash usage of R\$364 million in financing activities and cash usage of R\$1,851 million in investing activities; (ii) an increase of R\$235 million in dividends payable balance; and (iii) a decrease of R\$132 million in derivative financial instruments, net.

Sources of Funds

Our main sources of funds derive from our operating cash generation and financings.

Cash Flow

For ease of reference, lists of items and amounts explaining any increases or decreases in the discussion below are listed in the order in which such line items appear in our audited annual consolidated financial statements.

Our net cash provided by operating activities was R\$857 million in the year ended December 31, 2018, compared to R\$2,034 million in the year ended December 31, 2017 (a decrease of R\$1,177 million or 57.9%). The decrease primarily reflects:

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- (i) a net increase of R\$823 million in operating assets, primarily driven by sector financial assets (R\$421 million), dividends and interest on capital received (R\$419 million) and accounts receivable from consumers (R\$284 million), partially offset by a decrease in escrow deposits (R\$271 million) and concession financial assets – transmission companies (R\$57 million);
- (ii) a net decrease of R\$782 million in cash generation arising from increases in operating liabilities, primarily due to accounts payables (R\$1,415 million) and regulatory charges (R\$646 million), partially offset by an increase of R\$1,025 million in sector financial liability, other taxes and social contributions (R\$202 million) and payables of amounts provided by the CDE Account (R\$54 million);
- (iii) an increase of R\$413 million in net income, adjusted for the reconciliation of net cash; and
- (iv) a decrease of R\$15 million in cash consumption in income tax and social contributions (R\$493 million), offset by payments of interest (R\$478 million).

Our net cash provided by operating activities was R\$2,034 million in the year ended December 31, 2017, compared to R\$4,634 million in the year ended December 31, 2016 (a decrease of R\$2,600 million or 56.1%). The decrease primarily reflects:

- (i) an increase of R\$491 million in net income, adjusted for the reconciliation of net cash;
- (ii) net increase of R\$4,244 million in operating assets (which represents a decrease in the cash provided by operating activities), primarily driven by sector financial assets (R\$2,919 million), accounts receivable from consumers (R\$517 million) and escrow deposits (R\$1,004 million), partially offset by a decrease of R\$647 million in dividends and interest on capital received;
- (iii) net increase of R\$891 million in cash generation arising from increases in operating liabilities, primarily due to accounts payables (R\$1,349 million) and regulatory charges (R\$730 million), partially offset by a decrease of R\$1,378 million in sector financial liability; and
- (iv) a decrease of R\$262 million in cash consumption in income tax and social contributions (R\$538 million), offset by payments of interest (R\$275 million).

Our net cash from financing activities recorded a consumption of cash of R\$364 million in the year ended December 31, 2018 compared to a generation of cash of R\$2,440 million in the year ended December 31, 2017. This increase of R\$2,076 million was due to:

- (i) an increase of R\$6,213 million in fundraising from borrowings and debentures; and
- (ii) a decrease of R\$4,285 million related to payments of loans, financing, debentures and derivatives.

Our net cash from financing activities recorded a consumption of cash of R\$2,440 million in the year ended December 31, 2017 compared to consumption of cash of R\$337 million in the year ended December 31, 2016. This increase of R\$2,103 million was due to:

- (i) an increase of R\$1,517 million related to payments of loans, financing, debentures and derivatives;
- (ii) an increase of R\$105 million related to payment of dividends; and
- (iii) a decrease of R\$376 million in fundraising from borrowings and debentures.

Indebtedness

The following table sets forth our current and noncurrent indebtedness (in millions) for the year ended December 31, 2018:

	2018	
	Current	Noncurrent
Secured debt	769	5,170
Unsecured debt	2,594	11,844
Total	3,363	17,013

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Our total indebtedness increased by R\$208 million, or 1.0%, from December 31, 2017 to December 31, 2018, as result of the issuance of new debentures and other debt incurred, with amortization of the principal loans and debentures in the amount of R\$10,204 million; partially offset by the raising of R\$9,611 million in loans and debentures. Our main fundings are as follows:

- Issuances of debentures, principally in the amount of R\$1,590 million by CPFL Geração, R\$1,380 million by CPFL Paulista, R\$520 million by RGE Sul, R\$412 million by CPFL Piratininga and R\$220 million by RGE, to improve working capital, finance debt payments, refinance maturing debt and fulfill required investments.
- Incurrence of new debt denominated in U.S. dollars, principally in the amount of R\$801 million by CPFL Paulista, R\$1,129 million by RGE Sul, R\$627 million by RGE and R\$394 million by CPFL Piratininga. This debt was incurred in order to improve working capital, finance debt payments, refinance maturing debt and fulfill required investments.

In January and February 2019, we issued promissory notes and debentures, respectively, totaling R\$801 million through our subsidiaries CPFL Paulista (R\$351 million), CPFL Piratininga (R\$125 million) and CPFL Brasil (R\$325 million).

In 2019 and 2020, we expect to continue to take advantage of the financing opportunities offered by the market through issuing debentures and debt for working capital, both in the domestic and overseas markets, and those offered by the government through lines of financing provided by BNDES, in order to expand and modernize the electricity system, to undertake new investments in the Generation segment (both from Conventional Sources and Renewable Sources).

Moreover, through fundraising we seek to maintain the liquidity of the CPFL Energia group and a favorable debt profile through extending the average maturity of our debt and reducing its cost.

Terms of Outstanding Debt

Our total debt outstanding at December 31, 2018 (including accrued interest) was R\$20,377 million. R\$5,631 million of our total outstanding debt, or 27.6%, was denominated in foreign currency, principally U.S. dollars. We have entered into swap agreements in order to reduce our exposure to exchange rates that arises from these obligations. Of our total outstanding debt, R\$3,363 million falls due in 2019.

Our major categories of indebtedness are as follows:

- **Floating rate.** At December 31, 2018, we had R\$4,969 million outstanding under a number of loan agreements indexed at floating rates based on the TJLP and TLP (R\$4,348 million), CDI and SELIC rate (R\$500 million) and other loan agreements (R\$120 million). These loans are denominated in *reais*. The most significant part of these loans relates to: (i) loans indexed to the TJLP and TLP to our indirect generation subsidiary CPFL Renováveis (R\$2,894 million) and to our distribution subsidiaries, CPFL Paulista, CPFL Piratininga, CPFL Santa Cruz, and RGE (R\$1,439 million); and (ii) loans indexed to the CDI to our indirect generation subsidiary CPFL Renováveis (R\$268 million).
- **Fixed rate.** At December 31, 2018, we had R\$893 million outstanding under a number of loan agreements based on a fixed rate. These loans are denominated in *reais*. The most significant part of these loans relates to our indirect generation subsidiary CPFL Renováveis (R\$543 million).

- **Debentures.** At December 31, 2018, we had indebtedness of R\$8,941 million outstanding under several series of debentures issued by CPFL Energia, CPFL Paulista, CPFL Piratininga, RGE, CPFL Santa Cruz, CPFL Brasil, CPFL Geração and CPFL Renováveis. The terms of these debentures are summarized in Note 17 to our audited annual consolidated financial statements.
- **Foreign currency-denominated debt.** At December 31, 2018, we had the equivalent of R\$5,631 million outstanding under other loans denominated in foreign currency, principally U.S. dollars (US\$1,232 million or R\$4,774 million). We have entered into swap agreements in order to reduce our exposure to exchange rates that arises from these obligations.

See Notes 16, 17 and 33 to our audited annual consolidated financial statements for more information on our borrowings, debentures and derivatives.

Financial and Operating Covenants

We are subject to financial and operating covenants under our financial instruments and those of our subsidiaries. The main parameters established by financial institutions under these instruments are: (i) net indebtedness divided by EBITDA; (ii) EBITDA divided by Finance Income (Costs); (iii) net indebtedness divided by the sum of net indebtedness and net equity; (iv) maintaining the debt coverage ratio and own capitalization ratio; and (v) other restrictions such as restrictions on the payment of dividends to our subsidiaries. Certain of these covenants require us to calculate the metrics used for covenant compliance on an as adjusted basis, to reflect proportional consolidation of the financial position and results of operations of all companies in which we hold 10% or more of the voting stock, and to reflect our equivalent stake in each company that we control with less than 100% (such as CPFL Energias Renováveis S.A. and CERAN – Companhia Energética Rio das Antas).

Our Management and that of our subsidiaries monitor these ratios systematically and constantly to ensure that we and our subsidiaries remain in compliance with these contractual conditions. In the opinion of our Management, we were in compliance with these covenants as at December 31, 2018. Our subsidiaries have obtained the waivers specified below:

- CPFL Piratininga's debt coverage ratio requires 3.5 times the debt service amount for the period and its net indebtedness to EBITDA ratio. CPFL Piratininga obtained from BNDES and onlending banks a waiver from the obligation to comply with the financial ratio Net Debt to EBITDA contained in the financing agreements for the year ended December 31, 2018.
- Bio Ester's debt coverage ratio requires cash generation of 1.2 times the debt service amount for the period, its net indebtedness to EBITDA ratio, and its own equity to own equity plus net indebtedness ratio. Bio Ester obtained a formal waiver from BNDES for debt coverage ratio on December 2018 and the approval to exclude this covenant as of 2019.
- Bio Alvorada's debt coverage ratio requires cash generation of 1.2 times the debt service amount for the period, its net indebtedness to EBITDA ratio, and its own equity to own equity plus net indebtedness ratio. Bio Alvorada obtained a formal waiver from BNDES and the approval to exclude these covenant as of 2019.
- Bio Coopcana's debt coverage ratio requires cash generation of 1.2 times the debt service amount for the period, its net indebtedness to EBITDA ratio, and its own equity to own equity plus net indebtedness ratio. Bio Coopcana obtained a formal waiver from BNDES and the approval to exclude these covenant as of 2019.
- CPFL Renováveis's debt coverage ratio requires cash generation of 1.05 times the debt service amount for the period. CPFL Renováveis obtained the approval of Banco do Brasil and Itaú to exclude the debt coverage ratio from its first issuance of debentures.

Uses of funds

Our cash flow used for investing activities was R\$1,851 million in the year ended December 31, 2018 compared with R\$2,509 million in the year ended December 31, 2017. This decrease of R\$659 million (26.2%) primarily reflects:

- (i) a decrease of R\$410 million in property, plant and equipment mainly due to the use of cash for investments in our renewable energy subsidiaries;
- (ii) a decrease of R\$307 million in securities, pledges and restricted deposits; and
- (iii) a capital increase of R\$93 million in existing investees.

Our cash flow used for investing activities was R\$2,509 million in the year ended December 31, 2017 compared with R\$3,815 million in the year ended December 31, 2016. This decrease of R\$1,306 million (34.2%) primarily reflects:

- (i) a decrease of R\$1,497 million related to the price paid in business combination net of cash acquired in 2016 (specifically, the acquisition of RGE Sul, after accounting for acquired cash);
- (ii) a decrease of R\$341 million in property, plant and equipment mainly due to investments in our renewable energy subsidiaries; and
- (iii) an increase of R\$673 million in intangible assets primarily due to investments in our distribution activities.

Funding Requirements and Contractual Commitments

Our capital requirements are primarily for the following purposes:

- We make capital expenditures to continue improving and expanding our distribution system and to complete our renewable generation projects. See “—Capital Expenditures” below for more information on our historical and planned capital expenditures;
- Repayment or refinancing of maturing debt. At December 31, 2018 we had outstanding debt maturing during the following 12 months in the total amount of R\$3,363 million; and
- Dividends on a semiannual basis. We paid R\$322 million in dividends in 2018 (R\$337 million in 2017). See “Item 10. Additional Information—Allocation of Net Income and Distribution of Dividends—Interest Attributable to Shareholders’ Equity” and the Unconsolidated Statement of Cash Flow in Note 23.5 to our audited annual consolidated financial statements for more information on dividends.

CPFL Energia has adopted a strategy to preserve minimum cash in order to access the capital markets at more favorable conditions and cover cash needs for the year. We employed this strategy in 2018, are continuing to employ it in 2019 and expect to continue to employ it in 2020. CPFL has broad access to the capital markets to raise funds and possible additional cash needs.

Capital Expenditures

Our principal capital expenditures in the past several years have been for the maintenance and upgrading of our distribution networks and for our Renewable Generation projects. The following table sets forth our capital expenditures for the years ended December 31, 2018, 2017 and 2016:

	Year ended December 31,		
	2018	2017	2016
	(in millions of reais)		
Distribution	1,770	1,883	1,201
Liquidity and Capital Resources			203

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Conventional Generation	12	9	8
Renewable Generation	225	621	979
Commercialization and other investments	56	58	51
Total	2,062	2,570	2,239

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In addition to the capital expenditures shown above, we invested R\$3 million in 2018, R\$46 million in 2017 and R\$51 million in 2016 related to the construction of transmission lines through our transmission companies.

We plan to make capital expenditures aggregating R\$2,174 million in 2019, R\$2,565 million in 2020, R\$2,447 million in 2021, R\$2,410 million in 2022 and R\$2,341 million in 2023. Of total budgeted capital expenditures over this period, R\$11,938 million are expected to be invested in our Distribution segment, R\$968 million in our Renewable Generation segment and R\$60 million in our Conventional Generation segment. In addition, over this period, we plan to invest R\$642 million in our transmission activities and R\$175 million in our commercialization and services activities. Part of these expenditures, particularly in generation projects, is already contractually committed. See “—Liquidity and Capital Resources—Funding Requirements and Contractual Commitments” for more information. Planned capital expenditures for development of our generation capacity, and the related financing arrangements, are discussed in more detail under “Item 4. Information on the Company—Generation of Electricity.”

In addition, we invest in innovation and technology to improve the quality of our services and our operational efficiency, which are our perennial goals. The Smart Grid Program – focused on smart metering for high and medium voltage consumers and on the excellence of workforce management by the use of smartphones and new software – has increased our operational efficiency. We have already deployed 28,128 smart meters in the field, reaching the conclusion of the project implementation. Currently, our four distribution companies are already operating under the new data dispatch system for emergency commercial services. In 2018, we deployed the Distribution Automation project at the seven distribution companies that were located in the state of São Paulo during that time. In addition, in 2018 we deployed 1,430 ACRs, bringing the total number of ACRs in our concession areas to 9,889. These ACRs allow greater flexibility in the operation of the electrical system and are supported by our robust proprietary communication infrastructure, including digital radio communication systems, radio.

Termination of the statutory reserve of the financial asset of concession

The Extraordinary Shareholders’ Meeting held on April 27, 2018 approved the termination of the statutory reserve of the financial asset of concession and the transfer of the respective balance of R\$827 million to the retained earnings account.

Dividends

For the year ended December 31, 2016, our Board of Directors approved a dividend distribution of R\$214 million, equivalent to R\$0.210194546 per share, approved by shareholders in our Annual Shareholders’ Meeting, on April 28, 2017.

For the year ended December 31, 2017, our Board of Directors approved a dividend distribution of R\$280 million, equivalent to R\$0.275259517 per share, approved by shareholders in our Annual Shareholders’ Meeting, on April 27, 2018.

For the year ended December 31, 2018, our Board of Directors recommended a dividend distribution of R\$489 million, equivalent to R\$0.480182232 per share for approval by our shareholders in our Annual Shareholders’ Meeting, scheduled to take place on April 30, 2019.

	December 31, 2018
Profit for the year	2,058,040
Realization of comprehensive income	25,117
Adjustment of previous period – Adoption IFRS 9	(82,607)

Statutory reserve – concession financial asset – reversal	826,600
Profit basis for allocation	2,827,151
Legal reserve	(102,902)
Statutory reserve – working capital improvement	(2,235,465)
Mandatory dividend	(488,785)

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See Notes 23.5, 23.6 and 23.7 to our audited annual consolidated financial statements for additional information.

Contractual Obligations

The following table summarizes our contractual obligations and commitments as of December 31, 2018 (including our noncurrent contractual obligations).

	Payments due by period				
	Total	Less than 1 year	1–3 years	4–5 years	After 5 years
	<i>(in millions of reais)</i>				
Contractual obligations as of December 31, 2018:					
Suppliers	2,731	2,398	195	-	138
Debt obligations ⁽¹⁾	25,280	4,678	11,518	5,122	3,962
Public utilities ⁽¹⁾	253	21	36	48	148
Post-employment benefit ⁽²⁾	1,459	165	363	359	573
Regulatory charges	151	151	-	-	-
Others	288	226	3	3	56
Total of Balance Sheet items⁽¹⁾.	30,162	7,638	12,115	5,532	4,877
Leasings and rentals	46	9	14	13	10
Electricity purchase agreements ⁽³⁾	139,927	14,527	26,410	27,062	71,928
Distribution and transmission systems service charges ⁽⁴⁾	47,611	2,461	6,500	8,296	30,353
Premium of Hydrological Risk renegotiation (GSF) ⁽⁵⁾	416	8	44	52	312
Generation projects ⁽⁶⁾	41	39	2	-	-
Supplies	2,224	125	281	317	1,500
Other commitments related to the operation of concessions	261	13	29	32	187
Total of other commitments	190,525	17,183	33,278	35,772	104,291
Total of contractual obligations	220,687	24,821	45,394	41,304	109,168

(1) Includes interest payments, including future interest projected cash flow based on undiscounted, through index projections. These future interests are not recorded on our Balance Sheet.

(2) Estimated future contributions to the post-employment benefit.

(3) Amounts payable under long-term energy purchase agreements, which are subject to changing prices and provide for renegotiation under certain circumstances. The table represents the amounts payable for the contracted volumes

applying the year-end 2018 price. See “—Background—Prices for Purchased Electricity” and Note 35 to our audited annual consolidated financial statements for more information.

- (4) Estimated expenses related to distribution and transmission system services charges through the end of the concessions.
- (5) Estimated expenses for the payment of risk premium in connection with renegotiation of hydrological risk.
- (6) The power plant construction projects include commitments made basically to make funds available for construction and acquisition of concession related to the subsidiaries in the Renewable Energy segment.

Research and Development and Electricity Efficiency Programs

In accordance with applicable Brazilian law, since June 2000, companies holding concessions, permissions and authorizations for distribution, generation and transmission of electricity have been required to dedicate a minimum of 1.0% of their net operating revenue each year to research and development and electricity efficiency programs. Small Hydroelectric Power Plants and wind, solar and biomass energy projects are not subject to this requirement. Beginning in April 2007, our distribution concessionaires dedicated 0.5% of their net operating revenue to research and development and 0.5% to electricity efficiency programs, while our generation concessionaires dedicated 1.0% of their net operating revenue to research and development. 0.3% of the net operating revenue of our distribution concessionaires that is dedicated to research and development is directed to the MME and the National Fund for Scientific and Technological Development (*Fundo Nacional de Desenvolvimento Científico e Tecnológico*), or the FNDCT, and the remaining 0.2% is managed and invested by our distribution concessionaires. 0.1% of the net operating revenue of our distribution concessionaires that is dedicated to electricity efficiency programs is directed to the National Program for Conservation of Electrical Energy (*Programa Nacional de Conservação de Energia Elétrica*) and the remaining 0.4% is managed and invested by our distribution concessionaires. Similarly, for our generation concessionaires, 0.6% of the net operating revenue dedicated to research and development is directed to the MME and the FNDCT and the remaining 0.4% is managed and invested by our generation concessionaires.

Our electricity efficiency program is designed to foster the efficient use of electricity by our consumers, to reduce technical and commercial losses and offer products and services that improve satisfaction and loyalty and enhance our corporate image. Our research and development programs utilize technological research to develop products, which may be used internally, as well as commercialized in the market. We carry out certain of these programs through strategic partnerships with national universities and research centers, and the vast majority of our resources are dedicated to innovation and development in new technologies applicable to our business.

Our disbursements on research and development projects in the years ended December 31, 2018, 2017 and 2016 totaled R\$115 million, R\$176 million and R\$147 million, respectively.

Off-Balance Sheet Arrangements

As of December 31, 2018, we had no off-balance sheet arrangements that have or are reasonably likely to have a material impact on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

We have used the following amounts of our current funding arrangements:

Modality	Approval	Company	In 2018 (in thousands of reais)		
			Debt	Released	Balance
BNDES FINEM	In 2012	CPFL Renováveis	555,127	555,114	12
BNDES FINEM	In 2012	CPFL Renováveis	2,000	1,414	586
BNDES FINAME	In 2012	CPFL Renováveis	4,691	3,753	938
BNDES FINEM	In 2013	CPFL Renováveis	391,245	357,146	34,099
BNDES FINEM	In 2014	CPFL Renováveis	383,748	356,016	1,648
BNDES FINEM	In 2015	CPFL Renováveis	764,109	6,364	127,709
BNDES FINEM	In 2015	CPFL Renováveis	84,338	84,173	165
BNDES FINAME	In 2017	CPFL Serviços	11,286	384	10,902
BNDES FINEM	In 2018	CPFL Renováveis	1,445	1,194	251
Banco do Nordeste FNE	In 2018	CPFL Renováveis	209,205	198,821	10,384
BNDES FINEM	In 2018	CPFL Paulista	953,392	405,000	548,392
BNDES FINEM	In 2018	CPFL Piratininga	347,264	176,000	171,264
BNDES FINEM	In 2018	CPFL Santa Cruz	174,954	79,000	95,954
BNDES FINEM	In 2018	RGE	550,571	253,000	297,571
BNDES FINEM	In 2018	RGE Sul (RGE)	582,453	277,000	305,453

Trend Information

We seek to promote growth in each of our business segments: Distribution, Conventional Generation Sources, Renewable Generation Sources, Commercialization and Services.

We intend to continue to expand our Distribution segment, either through market growth or through the acquisition of energy distribution companies (if there are companies in the market with characteristics and at a price that will be beneficial to us).

Growth in our market is heavily influenced by economic growth, in particular, rates of employment, household income, retail sector sales and industrial production. In addition, the market is also influenced by the entry of new

clients and changes in weather and rainfall volume.

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Expectations for 2019 seem auspicious, as suggested by the improvement of several financial indicators. Brazil's sovereign risk spread is improving, considering the structural reforms (notably the pension and tax reforms) that are expected to be undertaken by the new federal government. Under these circumstances, the Ibovespa, the main Brazilian stock market index, has recorded significant gains, despite the significant corrections observed in major stock markets around the world.

The *real*/U.S. dollar exchange rate has remained reasonably stable, helping to maintain inflation expectations anchored within target ranges. The median market forecasts are currently predicting an inflation rate of around 4% for 2019, slightly below the 4.25% target established for the year. This has helped to consolidate expectations that the Central Bank will maintain the monetary policy at an expansionist stance for a long time. The median market forecast predicts that the SELIC will end 2019 at 7% (slightly above the current rate of 6.50%).

The impulse that the expansionary monetary policy will give to the credit market, together with the somewhat lower unemployment levels and accelerating income growth, will tend to support household consumption (which is expected to grow at a somewhat faster rate in 2019). The improvement in business confidence, supported by the expectation that structural reforms will be resumed, is expected to jumpstart investments, which, for the time being, have recovered only a very modest portion of the strong contraction observed during the recession.

Despite optimistic expectations, the outlook for 2019 continues to face significant uncertainties. The main risk continues to be political in nature: if the favorable perspectives for the economic reform agenda are frustrated, the exchange rate will likely face significant volatility and private confidence will likely deteriorate, weighing on consumption and investments. The external environment, in turn, tends to remain challenging, with the major world economies going through a period of slower growth.

As such, the Brazilian economy is expected to continue recovering at a moderate pace. The median market forecast currently predicts that the GDP growth rate will accelerate from 1.1% in 2018 to around 2.5% in 2019. Weak external demand and fiscal adjustment measures, which is expected to limit government consumption and public investments, are factors that are expected to limit the speed of recovery in the short term. Thus, the GDP is expected to reach the pre-recession level of early 2014 only by mid-2020.

Our Generation segment has shown high levels of growth in the last few years, with the acquisition and construction of new plants. In 2011, the creation of CPFL Renováveis marked an important moment for us. We plan to continue to expand our generation activities, both in the conventional energy and the renewable energy (wind farms, Small Hydroelectric Power Plants, Biomass Thermoelectric Power Plants and Solar Power Plants) sectors. We are currently pursuing this strategy through CPFL Renováveis, with an Installed Capacity of 2,133 MW (of which our share is 1,100 MW).

As of December 31, 2018, we had an Installed Capacity of 3,272 MW. In 2024, we expect to reach an Installed Capacity of 3,322 MW, when SHPP Lucia Cherobim and the Gameleira wind complex will have begun operations. We also have a 2,903 MW (of which our share is 1,247 MW) portfolio to be developed over the coming years through CPFL Renováveis. In addition, we will continue to seek out new projects in the conventional energy sector.

In the Commercialization and Services segment, our main objective is to maintain our leading position, in terms of market share, in order to guarantee our above-average profitability. In addition, we expect to expand our portfolio of services, retain the loyalty of our customers and expand our services to new markets.

Since our founding, we have employed a growth strategy based on operational excellence through innovation and technology, synergy, financial discipline and the accumulation of value. We plan to continue this in the future in

order to consolidate our strong position in the energy industry.

Critical Accounting Policies

In preparing our financial statements, we make estimates concerning a variety of matters. Some of these matters are highly uncertain, and our estimates involve judgments we make based on the information available to us. In the discussion below, we have identified several other matters that would materially affect our financial presentation if either (i) we used different estimates that we could reasonably have used or (ii) in the future we change our estimates in response to changes that are reasonably likely to occur.

The discussion addresses only those estimates that we consider most important based on the degree of uncertainty and the likelihood of a material impact if we used a different estimate. There are many other areas in which we use estimates about uncertain matters, but the reasonably likely effect of changed or different estimates is not material to our financial presentation. See the notes to our audited annual consolidated financial statements included herein for a more detailed discussion of the application of these and other accounting policies.

Intangible Assets and Contract Assets – In Progress

Intangible assets and contract assets – in progress includes rights related to intangible assets such as goodwill, concession exploitation rights, software and rights-of-way.

Goodwill that arises from the acquisition of subsidiaries is measured based on the difference between the fair value of the consideration paid for the acquisition of a business and the net fair value of the assets, adding the portion of noncontrolling interests and liabilities of the acquired subsidiary.

Goodwill is subsequently measured at cost less accumulated impairment losses. Goodwill and other intangible assets with indefinite useful lives, if any, are not subject to amortization and are tested annually for impairment.

Negative goodwill is recognized as a gain in the statement of profit or loss in the year of the business acquisition.

In the individual financial statements, fair value adjustments (value added) of net assets acquired in business combinations are included in the carrying amount of the investment and the amortization is classified in the individual statement of income as “equity interest in associates and joint ventures” in accordance with the Interpretation of the Accounting Pronouncements Committee (*Interpretação do Comitê de Pronunciamentos Contábeis*), or ICPC, 09 (R2). In the consolidated financial statements, the amount is stated as an intangible asset and its amortization is classified in the consolidated statement of profit and loss as “amortization of concession intangible asset” in other operating expenses.

Intangible assets corresponding to the right to operate concessions may have three origins, as follows:

- (i) Acquisitions through business combinations: the portion arising from business combinations that corresponds to the right to operate the concession amortized using the straight-line method over the remaining period of the concessions;
- (ii) Investments in infrastructure (International Financial Reporting Interpretations Committee, *or* IFRIC, 12 – Concession contracts) - in progress: under the electric energy distribution concession agreements with our subsidiaries, the recognized intangible assets correspond to the concessionaire’s right to charge the consumers for use of concession infrastructure. Since the exploration term is defined in the agreement, intangible assets with defined useful lives are amortized over the concession period in proportion to a curve that reflects the consumption pattern in relation to the expected economic benefits.

Items comprised in the infrastructure are directly tied to our electric energy distribution operation and comply with the same regulatory rules;

- (iii) Use of public asset: certain generation concessions were granted with the condition of payments to the federal government for use of public asset. On the signing date of the respective agreements, our subsidiaries recognized intangible assets and the corresponding liabilities, at present value. The intangible assets, capitalized by interest incurred on the obligation until the start-up date, are amortized on a straight-line basis over the remaining period of each concession.

As of January 1, 2018, the concession infrastructure assets of our distribution companies must be classified as contract assets during the construction or improvement period in accordance with the criteria of IFRS 15.

Impairment of Financial Assets

This policy is applicable from January 1, 2018.

- Financial Assets

IFRS 9 replaces the incurred loss model in IAS 39 with an expected credit loss (ECL) model.

The CPFL Energia group assesses evidence of impairment for certain receivables at both an individual and a collective level. Receivables that are not individually significant are collectively assessed for impairment. Collective assessment is carried out by grouping together assets with similar risk characteristics.

The CPFL Energia group recognizes impairment losses for ECLs on: (i) financial assets measured at amortized cost; (ii) debt investments measured at fair value through other comprehensive income, or FVOCI, when applicable; and (iii) contract assets.

The CPFL Energia group measures impairment allowances, adopting the simplified method of recognition, at an amount equal to lifetime ECLs, except for debt securities that are determined to have low credit risk at the reporting date, which are measured at 12-month ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating the expected credit losses, the CPFL Energia group considers a simplified approach of default assessment which consists of measuring the expected loss of a financial asset equivalent to the lifetime expected credit loss of an asset including reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the CPFL Energia group's historical experience, informed credit assessment and including forward-looking information.

The CPFL Energia group considers a financial asset to be in default when the borrower has not complied with its contractual payment obligations and is unlikely to pay its obligations.

The CPFL Energia group uses an allowance matrix based on its historical default rates observed along the expected lifetime of the trade receivables to estimate the expected credit losses for the lifetime of the asset where the history of losses is adjusted to consider the effects of the current conditions and its forecasts of future conditions that did not affect the period in which the historical data were based.

The methodology developed by the CPFL Energia group resulted in a percentage of expected loss for bills of consumers, concessionaires and licenses that is in compliance with IFRS 9 and is described as expected credit losses, comprising in a single percentage the probability of loss weighted by the expected loss and possible results, that is, comprising the Probability of Default, Exposure At Default and Loss Given Default.

At each reporting date, the CPFL Energia group assesses whether financial assets carried at amortized cost and debt securities at FVOCI, when applicable, are credit-impaired. A financial asset is "credit-impaired" when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
a breach of contract;
-
- the restructuring of a loan or advance by the CPFL Energia group on terms that the CPFL Energia group would not consider otherwise;
- Probability that the borrower will enter bankruptcy or other financial reorganization; or
-
- the disappearance of an active market for a security because of financial difficulties.
-

Impairment losses related to consumers, concessionaires and licensees recognized in financial assets and other receivables, including contract assets, are recognized in profit or loss.

- Non-Financial Assets

Non-financial assets that have indefinite useful lives, such as goodwill, are tested annually for impairment to assess whether the asset's carrying amount exceeds its recoverable amount. Other assets subject to amortization are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may be impaired.

An impairment loss is recognized if the carrying amount of an asset exceeds its estimated recoverable amount, which is the greater of (i) its fair value less costs to sell or (ii) its value in use.

The assets (e.g., goodwill and concession intangible assets) are segregated and grouped together at the lowest level that generates identifiable cash flows (the "cash generating unit"). If there is an indication of impairment, the loss is recognized in profit or loss. Except in the case of goodwill impairment, which cannot be reversed in the subsequent period, impairment analyses are reassessed for any possible reversals.

Pension Liabilities

We sponsor pension plans and disability and death benefit plans covering substantially all of our employees. The determination of the amount of our obligations for pension benefits depends on certain actuarial assumptions, including discount rate, inflation, etc.

Deferred Tax Assets and Liabilities

We account for income taxes in accordance with IFRS, which requires an asset and liability approach to recording current and deferred taxes. Accordingly, the effects of differences between the tax basis of assets and liabilities and the amounts recognized in our financial statements have been treated as temporary differences for the purpose of recording deferred income tax.

We regularly review our deferred tax assets for recoverability. If evidences are not enough to prove that it is more likely than not that we will recover such deferred tax assets, then such asset is not registered in the balance sheet of the company. Also, if there are no evidences that allow us to expect sufficient future taxable income, or if there is a material change in the actual effective tax rates or time period within which the underlying temporary differences become taxable or deductible, we could be required to establish a valuation allowance against all or a significant portion of our deferred tax assets resulting in a substantial increase in our effective tax rate and a material adverse impact on our operating results.

Provision for Tax, Civil and Labor Risks

We and our subsidiaries are party to certain legal proceedings in Brazil arising in the normal course of business regarding tax, labor, civil and other matters.

Accruals for provision for tax, civil and labor risks are estimated based on historical experience, the nature of the claims, and the current status of the claims. The evaluation of these risks is performed by various specialists, inside and outside of the company. Accounting for provision for tax, civil and labor risks requires significant judgment by Management concerning the estimated probabilities and ranges of exposure to potential liability. Management's assessment of our exposure to provision for tax, civil and labor risks could change as new developments occur or more information becomes available. The outcome of the risks could vary significantly and could materially impact our consolidated results of operations, cash flows and financial position.

Financial Instruments

This policy is applicable from January 1, 2018.

- Financial Assets

Financial assets are initially recognized on the date that they are originated or on the trade date at which we or our subsidiaries become parties to the contractual provisions of the instrument. Derecognition of a financial asset occurs when the contractual rights to the cash flows from the asset expire or when the risks and rewards of ownership of the financial asset are transferred.

Subsequent Measurement of Gains and Losses: Policy applicable from January 1, 2018

Financial assets measured at fair value through profit or loss (FVTPL)	These assets are subsequently measured at fair value. Net gains or losses, including interest or dividend income, are recognized in profit or loss.
Financial assets at amortized cost	These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on the derecognition is recognized in profit or loss.
Debt investments at fair value through other comprehensive income (FVOCI)	These assets are subsequently measured at fair value. Net gains and losses are recognized in other comprehensive income, except the interest income calculated using the effective interest method, foreign exchange gains and losses and impairment, that are recognized in profit or loss. In the moment of the derecognition, the accumulated gain or loss in other comprehensive income (loss) is reclassified to profit or loss for the period.
Equity instruments at fair value through other comprehensive income	These assets are subsequently measured at fair value. Changes in fair value are recognized in other comprehensive income (loss) and never will be reclassified in profit or loss. Dividends are recognized as gains in profit or loss (unless the dividend clearly represents a recovery of part of the investment cost).

Subsequent Measurement of Gains and Loss: Policy applicable before January 1, 2018

Financial assets measured at fair value through profit or loss (FVTPL)	These assets are subsequently measured at fair value. Net gains or losses, including interest or dividend income, are recognized in profit or loss.
Held-to maturity financial assets	These assets are measured at amortized cost using the effective interest method.
Loans and receivables	These assets are measured at amortized cost using the effective interest method.
Available-for-sale financial assets	These assets are measured at fair value and changes therein (other than impairment losses, interest income and foreign currency differences on debt instruments), are recognized in Other Comprehensive Income and accumulated in the fair value reserve. When these assets were derecognized, the gain or loss accumulated in equity are reclassified to profit or loss.

The indemnification rights at the end of the concession term of our distribution subsidiaries are classified as measured at fair value through profit or loss and the changes in the fair value of this asset are recognized in profit or loss.

Financial assets are not reclassified subsequent to their initial recognition unless the CPFL Energia group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

Amortized Cost: A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL.

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are related solely to payments of principal and interest on the principal amount outstanding.

Fair Value through Other Comprehensive Income (FVOCI): A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the CPFL Energia group may irrevocably elect to present subsequent changes in the investment's fair value in Other Comprehensive Income. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortized cost or as at FVOCI as described above are measured at FVTPL. This includes all derivative financial assets. (See Note 33 to our audited annual consolidated financial statements). On initial recognition, the CPFL Energia group may irrevocably designate a non-derivative financial asset that otherwise meets the requirements to be measured at amortized cost, at FVOCI or at FVTPL, if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Business Model Assessment:

The CPFL Energia group conducts an assessment of the objective of the business model in which a financial asset is held at the portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes the stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether:

- management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realizing cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the CPFL Energia group's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- how managers of the business are compensated (e.g., whether compensation is based on the fair value of the assets managed or the contractual cash flows collected); and
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

The transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the CPFL Energia group's continuing recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL.

Assessment whether contractual cash flows are solely payments of principal and interest:

For the purposes of this assessment, “principal” is defined as the fair value of the financial asset on initial recognition. “Interest” is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g., liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the CPFL Energia group considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- prepayment and extension features; and
- terms that limit the Group's claim to cash flows from specified assets (e.g., based on the performance of an asset).

For transactions involving the purchase and sale of energy by the trading subsidiaries, the CPFL Energia group has an accounting policy aligned with its business strategy with instruments measured at amortized cost, which refer to agreements already entered into and still held with the purpose of receipt or delivery of energy in accordance with the requirements by the company related to purchase or sale. The transactions are usually long term and are never settled by the net cash amount or with another financial instrument and, even if some contract has a certain flexibility, the strategy of the Group's portfolio is not changed for this reason.

- Financial Liabilities

Financial liabilities are initially recognized on the date that they are originated or on the trade date at which we or our subsidiaries become a party to the contractual provisions of the instrument. The CPFL Energia group has the following main financial liabilities:

- (i) Measured at fair value through profit or loss: these are financial liabilities that are: (i) held for trading; (ii) designated at fair value in order to match the effects of recognition of income and expenses to obtain more relevant and consistent accounting information; or (iii) derivatives. These liabilities are measured at fair value, which fair value changes recognized in profit or loss except for changes in fair value attributable to credit risk, which are recognized in comprehensive income.
- (ii) Measured at amortized cost: these are other financial liabilities not classified in the previous category. They are measured initially at fair value net of any cost attributable to the transaction and subsequently measured at amortized cost using the effective interest rate method.

The CPFL Energia group recognizes financial guarantees when these are granted to non-controlled entities or when the financial guarantee is granted at a percentage higher than our interest to cover commitments of joint ventures. Such guarantees are initially measured at fair value, by recognizing (i) a liability corresponding to the risk of non-payment of the debt, which is amortized against finance income simultaneously and in proportion to amortization of the debt, and (ii) an asset equivalent to the right to compensation by the guaranteed party or a prepaid expense under the guarantees, which is amortized by receipt of cash from other shareholders or at the effective interest rate over the term of the guarantee. After initial recognition, guarantees are measured periodically at the higher of the amount determined in accordance with IAS 37 and the amount initially recognized less accumulated amortization.

Financial assets and liabilities are offset and presented at their net amount when there is a legal right to offset the amounts and the intent to realize the asset and settle the liability simultaneously.

The classifications of financial instruments (assets and liabilities) are described in Note 33 to our audited annual consolidated financial statements.

- Issued Capital

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Common shares are classified as equity. Additional costs directly attributable to share issuances and share options are recognized as a deduction from equity, net of any tax effects.

Revenue Recognition

This policy is applicable from January 1, 2018.

The operating revenue in the normal course of our subsidiaries' activities is measured at the fair value of the consideration received or receivable. The operating revenue is recognized when it represents the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services.

IFRS 15 establishes a revenue recognition model that considers five steps: (i) identify the contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation.

Thus, revenue is recognized only when (or if) the performance obligation is satisfied, that is, when the "control" of the goods or services of a certain transaction is actually transferred to the customer.

The revenue from electric energy distribution is recognized when the energy is supplied. The energy distribution subsidiaries perform the reading of the consumption of their customers based on a reading routine (calendar and reading route) and invoice the consumption of MWh monthly based on the reading performed for each consumer. As a result, part of the energy distributed during the month is not billed at the end of the month and, consequently, an estimate is developed by Management and recorded as "Unbilled." This unbilled revenue estimate is calculated using as a base the total volume of energy of each distributor made available in the month and the annualized rate of technical and commercial losses.

The revenue from energy generation sales is recognized based on the assured energy and at tariffs specified in the terms of the supply contracts or the current market price, as appropriate.

The revenue from energy commercialization is recognized based on bilateral contracts with market agents and properly registered with the CCEE.

The revenue from services provided is recognized when the service is provided, under a service agreement between the parties.

The revenue from construction contracts is recognized based on the reach of the performance obligation over time, considering the fulfillment of one of the following criteria:

- (i) the customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs;

- (ii) the entity's performance creates or enhances an asset (for example, work in progress) that the customer controls as the asset is created or enhanced; or
- (iii) the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

The provision of infrastructure construction services for transmission companies is recognized in accordance with IFRS 15, against a contract asset.

The revenues of the transmission companies, recognized as operating revenue, are:

- **Construction Revenue:** Refers to the services of construction of electric energy transmission facilities. These are recognized according to the percentage of completion of the construction works.

- **Remuneration:** Refers to the interest recognized under the straight-line method on the amount receivable from the construction revenue.
- **Revenue from Operations and Maintenance:** Refers to the services of operations and maintenance of electric energy transmission facilities aimed at non-interruption of availability of these facilities. No single consumer accounts for 10% or more of the CPFL Energia group's total revenue.

ITEM 6. Directors, Senior Management and Employees

Directors and Senior Management

Board of Directors

Our Board of Directors' main duties and responsibilities are established by Brazilian Corporate Law and our bylaws, and include, among others, the responsibility to determine our overall strategic guidelines, establish our general business policies, elect our executive officers and supervise their management. Our Board of Directors operates according to its Internal Rules (which establish, among other matters, the rules concerning the relationship between the Board of Directors and the committees, commissions and other departments of CPFL Energia and its subsidiaries), with due observance to the provisions of the Brazilian Corporate Law and our bylaws.

Under our bylaws, members of the Board of Directors are elected by the holders of our common shares at the annual general shareholders' meeting. According to our bylaws, our Board of Directors consists of a minimum of five members. Members of the Board of Directors serve one-year terms, re-election being permitted provided that they may be removed at any time by our shareholders at an extraordinary general meeting of shareholders. Our bylaws do not provide for a mandatory retirement age for our directors. The Board of Directors has one chairman and one vice-chairman, appointed among its members in the first meeting following the election of the directors.

The office of director may be permanently vacated by resignation, dismissal, disability, loss of mandate, proven impediment, death or the occurrence of other situations referred to by law, in which case the alternate director, if one has been elected, shall take the place of the director until the election of his substitute, which shall take place at the first general shareholders' meeting held after the vacancy occurred.

A director may resign by written communication to the chairman of the Board of Directors, which takes effect with regard to our company, from the receipt of such communication, and with regard to third parties, from the filing of the resignation document with the Commercial Registry and its publication, to be effected by the resigning director.

The Board of Directors shall meet at least 12 times a year and, whenever requested by the chairman in accordance with our bylaws and the Internal Rules of our Board of Directors. In the event of a tie, the chairman, or in his/her absence, the vice-chairman will have the deciding vote.

Under Brazilian Corporate Law, if a director or an executive officer has a conflict of interest with the company in connection with any proposed transaction, the director or executive officer must not vote in any decision of the Board of Directors, or of the board of executive officers, regarding such transaction, and must disclose the nature and extent of the conflicting interest for transcription in the minutes of the meeting. A director or an executive officer may not transact any business with CPFL Energia, including accepting any loans, except on reasonable or fair terms and conditions that are identical to the terms and conditions prevailing in the market or offered by third parties. Any transaction entered into between our shareholders or related parties and CPFL Energia (or its subsidiaries) that exceeds R\$12,745,999.99, as adjusted annually by the IGP-M index, must be previously approved by our Board of Directors.

Under Brazilian Corporate Law, combined with a decision by the CVM, non-controlling shareholders have the right to designate at least one member (and his/her respective alternate member) of our Board of Directors for election to the Board, provided that they hold at least 10.0% of the outstanding voting shares. Non-controlling shareholders that own more than 5.0% of voting shares may request multiple voting (*voto múltiplo*), which confers upon each voting share a number of votes equal to the number of members of the Board of Directors and gives the shareholder the right to accumulate his or her votes in one sole candidate, or distribute them among several candidates.

Currently, our Board of Directors consists of seven members, of which two are independents (in accordance with the listing regulations of the New Market segment of the B3, or the *Novo Mercado*, and our bylaws). Six members of our current Board of Directors were elected at our annual general meeting of shareholders held on April 27, 2018 and one member of our current Board of Director, Gustavo Estrella was elected at an extraordinary shareholders' meeting held on January 31, 2019. Gustavo Estrella was elected director to replace André Dorf, who resigned from our Board of Directors and as our chief executive officer on December 18, 2018, effective as of January 31, 2019. The terms of all seven members of our Board of Directors are expected to expire at our next annual general meeting of shareholders, scheduled to take place on April 30, 2019.

On December 18, 2018, in view of the resignation of our former chief executive officer and director, André Dorf, effective as of January 31, 2019, our Board of Directors approved an agreement between us and André Dorf for the termination of André Dorf's Services Agreement.

The following table sets forth the name, age and position of each current member of our Board of Directors. A brief biographical description of each of our directors follows the table.

Name	Age	Position
Bo Wen	53	Chairman
Shirong Lyu	54	Vice-chairman
Yang Qu	53	Member
Yumeng Zhao	45	Member
Gustavo Estrella	45	Member
Antonio Kandir	65	Independent Member
Marcelo Amaral Moraes	51	Independent Member

Bo Wen – Mr. Wen graduated in Electric Power Systems Engineering from Chongqing University in China in 1988 and later earned a Master of Science in Management degree from Xian Jiaotong University in China in 2002. He started his career at State Grid Gansu Electric Power Company, having experience in network planning, grid design, project design and construction, network operation and maintenance, procurement, rural electrification, law and policy research and business management, as well as holding the positions of field engineer, section chief, division chief, manager general, department director, deputy chief engineer in different branches and regional headquarters. In 2005, he was named Senior Vice President of State Grid Gansu Electric Power Company. In 2009, he was appointed Executive Vice President of State Grid Xinjiang Electric Power Company. From 2011 to 2018, he held the positions of General Director of the Philippines branch of the State Grid Corporation of China and Senior Vice President of the State Grid International Development Corporation. From 2011 to 2018, he held the positions of member of the Board of Directors of and Technical Director of the National Grid Corporation of the Philippines. As of 2018, he has held the position of Chairman of our Board of Directors, President of State Grid and Senior Vice President of State Grid International Development Corporation.

Shirong Lyu – Mr. Lyu graduated in Electric Power Systems and Automation from Xi’an Jiaotong University in 1987 and earned a PhD degree in Electric Power Systems and Automation from Xi’an Jiaotong University in 1999. He started his career in the electric power sector of the State Grid Group of the Northwest China Grid Company Limited, where he worked as Director of the Construction Department starting in 2003. He also worked as Deputy General Director of the State Grid Corporation of China in the Philippines branch and as Head of the P&E Group of the National Grid Corporation of the Philippines from 2007 to 2010, as Vice President of State Grid Brazil Holding Company from 2010 to 2014, and as Vice President of State Grid International Development Co., Ltd. from 2014 to 2016. From 2016 to 2018, he has held the position of Deputy General Director of the International Cooperation Department of State Grid Corporation of China.

Yang Qu – Mr. Qu graduated in Electrical Power Systems and Automation from Chengdu University of Science and Technology in 1986. He has worked in the State Grid group since 1986. He began his career in Henan Transmission and Transformation Engineering Company, where he worked from 1986 to 2003. Between 2003 and 2006, he served as Deputy Chief Engineer and Director at the Henan Transmission and Transformation Engineering Company for State Grid Henan Electric Power Company’s Vietnam office. He held the position of Deputy Director of State Grid Henan Electric Power Company in Vietnam from 2006 to 2008, Deputy Director at the General Office of the International Cooperation Department of the State Grid Corporation of China from 2008 to 2009, Deputy Director of the International Business Department of State Grid International Development Co., Ltd from 2009 to 2011, and Director from 2011 to 2014 of the Business Development Department of State Grid Brazil Holding SA. Since 2014, he has been Vice President at State Grid Brazil Holding SA. Mr. Qu was also elected Chief Executive Officer of State Grid Brazil Power Participações Ltda. (one of our shareholders) in 2016, and elected an officer of ESC Energia S.A. (one of our shareholders) in 2017.

Yumeng Zhao – Mr. Zhao graduated in Eletromagnetic Instruments and Measuring from Huazhong University of Science and Technology in 1994 and later earned a Master’s degree in Electrical Power Systems and Automation from Hefei University of Technology and an MBA from the Royal Melbourne Institute of Technology. He began his career in 1994 in the electric power sector of State Grid Group. He held the position of Head of the Marketing Department at Hefei Power Supply Company from 2004 to 2006. He was also the manager of the Marketing Department of State Grid Anhui Electric Power Company in 2006, a deputy manager of Xuancheng Power Supply Company from 2006 to 2013, President of Chuzhou Electric Power Company from 2009 to 2013 and was general manager of Anqing Power Supply Company from 2013 to 2016. From 2016 to 2017, he was the Assistant President of State Grid International Development Co., Ltd. On March 26, 2018, Mr. Zhao was also elected as an alternate member to our Human Resources Management Committee. He is also currently acting as our Deputy Chief Financial Officer and is also a member of our strategy commission.

Gustavo Estrella – Mr. Estrella graduated in Business Administration from the State University of Rio de Janeiro (UERJ) in 1997. He earned a master’s degree in Finance from the Brazilian Institute of Capital Markets (IBMEC / RJ) in 2000. He has worked at Lafarge Group, Light S.A. and Brasil Telecom S.A. He has held positions at our company since 2001, where he has worked as Manager of Economic and Financial Planning, Investor Relations Officer and Planning and Control Director. In 2013, he became Financial and Investor Relations Vice President at CPFL Energia; Financial and Investor Relations Officer at and member of the Board of Director of CPFL Paulista, CPFL Piratininga - and CPFL Geração and RGE: as well as Officer and member of the Board of Directors of several subsidiaries of the CPFL group. His term as officer at such positions ended on February 1, 2019, when he became Chief Executive Officer at CPFL Energia. He is currently Vice-Chairman of the Board of Directors of CPFL Renováveis and member of the Board of Directors of RGE, CPFL Paulista, CPFL Piratininga and CPFL Geração. He is also currently acting as our Business Development and Planning Executive Vice-President, as well as Business Management Executive Vice President³.

Antonio Kandir – Mr. Kandir graduated in Mechanic Engineering from Escola Politécnica of the Universidade de São Paulo (USP) and earned a master’s degree in economics from the Universidade Estadual de Campinas – UNICAMP and a Ph.D. in Economics from the Universidade Estadual de Campinas – UNICAMP. Mr. Kandir was Minister of Planning and Budget of the State, a Congressman, President of the *Conselho Nacional de Desestatização*, Governor of the Inter-American Development Bank, Special Secretary of Economic Policy, President of the *Instituto de Pesquisa Econômica Aplicada* (IPEA), Chief Officer of Kandir e Associados S/C Ltda. from 1992 to 1994 and coordinator of studies of Itaú Planejamento e Engenharia from 1981 to 1982, with responsibility for private equity and hedge funds. He was also a partner at Governança & Gestão Investimentos Ltda. (since 2004) and GG Capital Investimentos Ltda. from 2012 to 2016. He also worked as a professor at the Universidade Estadual de Campinas – UNICAMP, the Pontifícia Universidade Católica de São Paulo from 1984 to 1985 and was an Assistant Faculty Fellow at the University of Notre Dame in 1987. He currently sits on the boards of directors of the following companies: (i) CSU Cardsystem S.A., a technology services provider; (ii) Comiex Empreendimentos e Participações Ltda., an investment management company; (iii) GOL Linhas Aéreas Inteligentes, an aviation company; (iv) Vibra Agroindustrial S.A., a poultry company; (v) AEGEA Saneamento e Participações S.A., a sanitation company; (vi) Banco Ribeirão Preto, a financial institution, and (vii) MRV Engenharia e Participações S.A., a construction company. Mr. Kandir also previously served on the boards of directors of the following companies: (i) Marisol S.A., a clothing company, from 2014 to 2018; (ii) Companhia Providência Indústria e Comércio, a nonwoven fabrics company from 2008 to 2014; (iii) Amil Saúde, a healthcare insurance company; (iv) Banco Ribeirão Preto, a financial institution. None of these companies is part of the CPFL Energia group, or controlled by a shareholder holding more than 5% of the common shares of CPFL Energia.

³ Please refer to "–Executive Officers, below," regarding Executive Officers.

Marcelo Amaral Moraes – Mr. Moraes has been an independent director of CPFL Energia since 2017. He received a degree in economics from the Federal University of Rio de Janeiro (UFRJ) in 1991, completed an MBA from COPPEAD at UFRJ in November 1993, and received a post-graduate degree in Corporate Law and Arbitration from Fundação Getúlio Vargas in the state of São Paulo in November 2003. He is currently the chairman of the fiscal council of Vale S.A. and has been a member of this fiscal council since 2004, where he also held the position of alternate member of the Board of Directors in 2003. He also serves as chairman of the fiscal council of GOL Linhas Aéreas S.A. and a member of the fiscal council of Linux S.A.. Mr. Moraes also served as the chairman of the fiscal council of Aceco TI S.A. from 2016 to 2018. He was also a member of the Board of Directors of Eternit SA. from 2016 to 2018. He also served as Executive Officer of Stratus Investimentos Ltda. 2006 to 2010, as an observing member of the Board of Directors of Infinity Bio-Energy S.A. from 2011 to 2012, and as Executive Officer of Capital Dynamics Investimentos Ltda. from 2012 to 2015. None of these companies is part of the CPFL Energia group, or controlled by a shareholder holding more than 5% of the common shares of CPFL Energia. He is a member of our Related Parties Committee.

Executive Officers

The main duties and responsibilities of the members of our board of executive officers are established by Brazilian Corporate Law and our bylaws, and include, among others, executing the decisions of our Board of Directors and day-to-day management of the our company.

Under our bylaws, our board of executive officers is comprised of nine members that are appointed by our Board of Directors for a two-year term, with the possibility of re-election. Our current board of executive officers has six members occupying the existent positions, as Yuehui Pan is currently acting as our Deputy Chief Financial Officer and Mr. Gustavo Estrella is currently acting as Business Development and Planning Executive Vice-President, as well as Business Management Executive Vice President, pending election of individuals to these positions. The majority of our executive officers were elected at the Board of Directors' meeting held on May 8, 2017. On December 15, 2017, Mr. Gustavo Pinto Gachineiro was elected as Legal and Institutional Relations Executive Vice President, starting his term on January 7, 2018. On May 9, 2018, Mr. Yuehui Pan was elected Deputy Chief Financial Officer and since February 1, 2019 he has also occupied the position of Chief Financial and Investors Relations Officer. Mr. Gustavo Estrella has occupied the position of Chief Executive Officer since February 1, 2019.

On April 16, 2019, Mr. Wagner Luiz Schneider de Freitas informed the Company about his resignation from his position as Business Management Executive Vice President. Until the conclusion of the succession process, Mr. Gustavo Estrella, Chief Executive Officer of the Company, will hold the above mentioned position cumulatively, on an interim basis.

The following table sets forth the name, age and position of each current executive officer. A brief biographical description of each of our executive officers follows the table.

Name	Age	Position
		Chief Executive Officer and currently acting as Business Development and Planning Executive Vice-President and Business Management
Gustavo Estrella	45	Executive Vice President.
Yumeng Zhao	45	Deputy Chief Executive Officer
Yuehui Pan	37	Chief Financial and Investor Relations Officer and currently acting as Deputy Chief Financial Officer
Luis Henrique Ferreira Pinto	58	Regulated Operations Executive Vice President

Karin Regina Luchesi	42	Market Operations Executive Vice President
Gustavo Pinto Gachineiro	47	Legal and Institutional Relations Executive Vice President

Gustavo Estrella – Please see “Item 6. Directors, Senior Management and Employees—Directors and Senior Management—Board of Directors” for Mr. Estrella’s biography.

Yumeng Zhao – Please see “Item 6. Directors, Senior Management and Employees—Directors and Senior Management—Board of Directors” for Mr. Zhao’s biography.

Yuehui Pan – Mr. Pan graduated in Financial Management from Changsha University of Science and Technology in 2004, earned a Master’s degree in Business Administration from North China Electric Power University and an MBA from the Kellogg School of Management at Northwestern University. He began his career at the Department of Finance at China Power Technology Import and Export Company, from 2007 to 2009, and later held the position of Deputy Director of the Department of Financial Assets State Grid International Development Co., Ltd., from 2009 to 2010. He has also held the positions of Manager, from 2011 to 2013, and Vice-Director, from 2013 to 2016, in the Financial Department of State Grid Brazil Holding S.A. He later served as Chairman of the Fiscal Council of Belo Monte Transmissora de Energia S.A. and Chairman of the Fiscal Council of CPFL Renováveis, from 2017 to 2018. He is certified by the American Institute of Chartered Financial Analyst and the China Institute of Certified Public Accountants. In 2018, he became Deputy Chief Financial Officer of our company, which term ended on January 31, 2019. He then became the Chief Financial Officer and Investor Relations Officer of our company. He also serves as Chief Executive Officer, Chief Financial Officer and Chief Investors Relations Officer at several of our subsidiaries, and is a member of our Finance and Budget Commission.

Luis Henrique Ferreira Pinto – Mr. Ferreira Pinto graduated in Electrical and Electronic Engineering from the Engineering University of Barretos in 1985. He obtained a post-graduate degree in Electric System Engineering at Federal University of Itajubá (EFEI) in 1990 and obtained a post-graduate degree in Electrical Engineering at the State University of Campinas (UNICAMP) in 2001, without defending his thesis, holding two specializations, including a Master’s degree in Business Management obtained in 2004 and a Master’s degree in Financial Management, Controllership and Auditing obtained in 2011 from Fundação Getúlio Vargas (FGV). He has held several positions at Companhia Paulista de Força e Luz (CPFL), serving as an Operations Planning Engineer between 1986 and 2000, Transmission Service Division Manager between 2000 and 2001, the Electric System Planning Division Manager between 2001 and 2002, the Manager of the Operational Control Department at CPFL Paulista and CPFL Piratininga between 2002 and 2006, the Operations Officer at RGE between 2006 and 2009, and the Executive Officer at RGE between 2009 and 2011. He was CPFL Energia’s representative to the Interconnected Operations Coordination Group for the Electrical System in South/Southeastern Brazil - GCOI/GTPO/ELETOBRAS between 1986 and 1996, representative of the distributors Paulista, Piratininga and RGE to the working group for the initial public offering of CPFL Energia on the São Paulo and New York Stock Exchanges in 2006. He has also served as the Coordinator of the Technical Losses Group at ABRADÉE between 2005 and 2006, and was a professor of the Course on Technical Losses in the Energy Sector at the COGI Foundation between 2005 and 2006. He has also served as the CEO of RGE between June 2011 and April 2013 and as the CEO of CPFL Paulista and CPFL Piratininga between 2013 and 2015. Since 2015, he has been our Regulated Operations Executive Vice-President.

Karin Regina Luchesi – Ms. Luchesi graduated in Material Production Engineering from the Federal University of São Carlos in 2001 and obtained an Executive Master’s degree in Finance from Insper in 2010. She began her career in the Electric Sector, at the CCEE. She has held several positions within our company since 2001, serving for seven years as Manager of the Department of Energy Purchase and Sale Contract Management. In June 2011, she became Distribution Energy Sale Officer, while also acting as Energy Planning and Energy Management Officer from January to May 2014. She is currently an officer of several of our subsidiaries and sits on the Board of Directors of CPFL Renováveis, EPASA, Sul Geradora, CPFL Geração and Paulista Lajeado. Since 2015, she has been our Market

Operations Executive Vice-President.

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Gustavo Pinto Gachineiro – Mr. Gachineiro received a bachelor’s degree in law from the University of São Paulo (USP) in 1993 and an MBA from Fundação Getúlio Vargas in 2007. He was elected Legal and Institutional Relations Vice President of CPFL Energia in 2017. He previously held positions at Global Village Telecom (GVT), where he worked as Chief Legal Officer from 2003 to 2008, interim Vice President for Legal and HR from 2008 to 2012, and Vice President for Legal and Institutional Relations from 2012 to 2015. Following the acquisition of GVT by the Telefonica Group, he served as Legal and Corporate Relations Vice President at Telefônica Brasil S/A (Vivo) from 2015 to 2017. Prior to his positions at GVT and Vivo, he served as Chief Legal Officer at Elucid (Grupo Rede) in 2003, Chief Legal Officer at AT&T Brazil from 1999 to 2003, and as Legal Manager at Stiefel Laboratories in 1999. He also served as in-house counsel at Promon Eletrônica from 1997 to 1999 and at Bardella S/A Indústrias Mecânicas from 1995 to 1997. Mr. Gachineiro is also an alternate member of the Board of Directors of CPFL Renováveis.

Fiscal Council

Under Brazilian Corporate Law, the *Conselho Fiscal*, or fiscal council, is a corporate body independent of a company’s management and external auditors. Our fiscal council is permanent and is composed of three members (and their respective alternate members). The primary responsibility of the fiscal council is to review Management’s activities and our financial statements, and to report its findings to our shareholders. Brazilian Corporate Law requires fiscal council members to receive as remuneration at least 10.0% of the average annual amount paid to our executive officers, excluding benefits and profit sharing. Non-controlling holders of common shares owning an aggregate of at least 10.0% of the common shares outstanding may also elect one member of the fiscal council (and her/his respective alternate member).

Under Brazilian Corporate Law, our fiscal council may not include members who are on our Board of Directors, are on the board of executive officers, are employed by us or a controlled company or a company of the same group, or are spouses or relatives (up to the third degree) of any member of our Management or Board of Directors. Our fiscal council, elected at our shareholders’ meeting held on April 27, 2018 with a mandate lasting until our next shareholders’ meeting, set to take place on April 30, 2019, is composed of three members: Lisa Birmann Gabbai, Ran Zhang and Ricardo Florence dos Santos. The current alternate members of our fiscal council are: Reginaldo Ferreira Alexandre, Chenggang Liu and Jia Jia. For information regarding a proceeding related to one of our fiscal council’s alternate members, see “Item 8. Financial Information—Legal Proceedings—Proceedings Related to our Fiscal Council.”

In accordance with the listed company audit committee rules of the NYSE and the SEC, on June 8, 2005 our Board of Directors designated and empowered our fiscal council to perform the role of the audit committee in reliance on the exemption set forth in Exchange Act Rule 10A-3(c)(3).

Advisory Committees

Our bylaws allow our Board of Directors to establish committees and *ad hoc* commissions to assist the Board of Directors with strategic issues. Currently, there are three committees within our company: the Management Processes, Risks and Sustainability Committee, the Human Resources Management Committee and the Related Parties Committee, all governed by the Internal Rules of Committees of the Board of Directors.

The committees do not have decision-making authority and their recommendations are not binding upon the Board of Directors.

Management Processes, Risks and Sustainability Committee. Our Management Processes, Risks and Sustainability Committee supports the Board of Directors in examining and monitoring the following processes: (i) supervising internal audit; (ii) supervising risk management and compliance activities; (iii) supervising the Sustainability Platform and the Ethics System, including the channels for reporting complaints; (iv) managing the delegation of Sarbanes Oxley and Audit Committee activities to the Fiscal Council; and (v) forwarding to the Board of Directors proposals for improvements in business management processes, as needed. The members of this committee are Yunwei Liu, Zhang Na and Gustavo Henrique de Aguiar Sablewski.

Human Resources Management Committee. Our Human Resources Management Committee is responsible for assisting the Board of Directors by: (i) coordinating the CEO selection process; (ii) defining criteria for compensation of our Board of Directors, executive officers and Fiscal Council; (iii) aligning our strategy for directly- and indirectly-controlled companies as well as companies with shared control, including contracting instruments and short- and long-term incentive plans; and (iv) managing our organizational structure, succession plan and related assessments. The members of this committee are Yumeng Zhao, Li Zhang and Rodrigo Agnew Ronzella.

Related Parties Committee. Our Related Parties Committee is responsible for assisting the Board of Directors by: (i) evaluating the selection procedures of suppliers and third-party construction and other services from related parties and ensuring these transactions are conducted fairly and consistent with market practice; (ii) evaluating energy purchase or sale agreements with related parties ensuring these transactions are conducted fairly and consistent with market practice; and (iii) issuing our list of related parties. The members of this committee are Hongwu Ding, Fu Li and Marcelo Amaral Moraes.

In addition to the advisory committees, our Board of Directors may create *ad hoc* commissions, if deemed necessary. The main responsibilities of an *ad hoc* commission include evaluating and addressing specific matters that may arise. In 2016, our Board of Directors set up two *ad hoc* commissions: the Strategy Commission and the Finance and Budget Commission. These *ad hoc* commissions remained in place throughout 2017 and 2018.

Compensation

Under Brazilian Corporate Law, our shareholders are responsible for establishing the aggregate amount we pay to the members of our Board of Directors and our executive officers. Once our shareholders establish an aggregate amount of compensation for our Board of Directors and executive officers, the Human Resources Management Committee of our Board of Directors is responsible for setting the criteria for individual compensation levels.

Pursuant to Article 17 of our bylaws, the Board of Directors is responsible for establishing the individual monthly compensation due to the executive officers, with due observance to the aggregate amount approved by the shareholders.

The members of our Board of Executive Officers receive a portion of their compensation directly from us, and a portion from our subsidiaries on an allocation basis in return for services provided to those subsidiaries. Our subsidiaries do not pay any member of our Board of Directors or Fiscal Council or any of our executive officers for any duties carried out exclusively for CPFL Energia.

The table below shows the aggregate compensation paid directly by CPFL Energia to the members of our Board of Directors and Fiscal Council and our executive officers for 2018:

Compensation for the year ended December 31, 2018

Management Bodies	Board of Directors	Fiscal Council	Executive Officers	Total
Number of members	2.00 members ⁽¹⁾	1.67 members ⁽¹⁾	7.67 members ⁽¹⁾	11.33 members ⁽¹⁾
	(in thousands of reais)			
Fixed annual compensation:				
Salary	517	236	8,772	9,525
Direct or indirect benefits	-	-	396	396
Other	102	47	5,043	5,192
Variable compensation:	-	-	-	-
Bonus	-	-	8,620	8,620
Other	-	-	5,123	5,123
Post-employment benefits	-	-	754	754
Total compensation	619	283	28,708	29,610

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(1) Represents the weighted average number of members.

The table below sets forth the compensation paid by our subsidiaries to our Management for 2018:

	Year ended December 31, 2018		
	Board of Directors	Fiscal Council	Executive Officers
	Fixed	Fixed	Total (fixed and variable)
	(in thousands of reais)		
Subsidiaries ⁽¹⁾	-	-	9,255

(1) Compensation amounts include charges and accruals.

The table below shows the aggregate compensation expected to be paid directly by CPFL Energia to the members of our Board of Directors and Fiscal Council and our executive officers for 2019 (excluding any compensation to be paid by our subsidiaries to such individuals):

Management Bodies	Approved compensation for the year ending December 31, 2019 ⁽¹⁾			
	Board of Directors	Fiscal Council	Executive Officers	Total
	2 members ⁽²⁾	2 members ⁽²⁾	9 members ⁽²⁾	13
Number of members	(in thousands of reais)			
Fixed annual compensation:				
Salary	538	281	10,591	11,410
Direct or indirect benefits	-	-	674	674
Other	108	56	2,965	3,129
Variable compensation:				
Bonus	-	-	10,784	10,784
Other	-	-	7,115	7,115
Post-employment benefits	-	-	925	925
Total compensation	646	337	33,054	34,037

(1) Represents the expected compensation for a 12-month period (from May 2019 to April 2020), to be approved in the Annual Shareholders' Meeting of CPFL Energia, which is scheduled to take place on April 30, 2019.

(2) Represents the weighted average number of members.

In addition, the CVM requires us to disclose the aggregate compensation paid by the CPFL group to all members of the boards of directors and fiscal councils, and all executive officers, of all companies in our consolidated group. This aggregate compensation, including cash and benefits in kind, amounted to R\$90.8 million for 2018, including R\$10.3 million in variable compensation. The total amount set aside or accrued by the CPFL group to provide pension, retirement or similar benefits for the same period was R\$2.2 million.

Our executive officers receive fixed and variable compensation that aims to attract, retain and incentivize these individuals in accordance with our standards of excellence and the goals set forth in our strategic plan. Members of our Board of Directors and Fiscal Council receive fixed compensation that is not based on individual or organizational performance indicators.

The table below shows the proportion of fixed and variable compensation and benefits paid to members of our Board of Directors and Fiscal Council and our executive officers:

	Board of Directors	Fiscal Council	Executive Officers*
Fixed compensation:	100%	100%	48%
Benefits:	-	-	4%
Variable compensation:	-	-	-
Short-term incentives	-	-	30%
Long-term incentives	-	-	18%
Total	100%	100%	100%

(*) Overall contributions to aggregate compensation. Proportion of fixed and variable compensation of specific individuals may vary.

Compensation of Members of our Board of Directors and Fiscal Council

The independent members of our Board of Directors and the members of the Fiscal Council receive monthly fees that are set in accordance with market standards and updated annually. The remaining members of our Board of Directors do not receive compensation for holding the position of member of our Board of Directors. Alternate members do not receive any compensation, except when actually representing the relevant effective member.

Compensation of Executive Officers

Our executive officers receive a fixed monthly salary (adjusted according to research annually carried out by specialized companies), benefits, and variable incentives. This compensation policy aims to encourage our executives to seek the greatest returns on our investments and projects, to align market practices and to provide for the retention of executives through the following tools:

- benefits reflecting market practice;
- short-term incentives: aim to direct our executive officers' behavior to perfect our business strategy and achieve results;
- long-term incentives, such as cash bonuses under our long-term incentive plan discussed below: aim to create a long-term vision and foster commitment, aligning the interests of our executive officers and our shareholders and rewarding positive results and the sustainable creation of value.

This variable compensation policy reflects corporate and individual goals established under our strategic plan and our Shareholder Value Creation System. Our Human Resources Management Committee tracks and evaluates our executive officers' performance in accordance with annual goals, which include financial results, individual growth, value creation and human resource management.

Long-term Incentive Plans

Our long-term incentive plan, known as the ILP (*Plano de Incentivo de Longo Prazo*), seeks to align the interests of the executive officers of CPFL Energia, the Chief Executive Officers of our controlled companies and

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eligible Directors and Managers of CPFL Energia, or Eligible Professionals, with those of our shareholders, including share price performance, as part of their overall compensation mix, with the aim of fostering long-term commitment and the consistent and sustainable creation of value. By linking a share valuation target with our long-term strategic plan, we seek to align the aims of the ILP with market recognition of the achievement of our strategic plan. The ILP also aims to incentivize and retain employees who provide the greatest value through their individual performance. Beneficiaries under the ILP receive cash bonuses after a vesting period when our share price reaches certain targets. ILP is reviewed annually by our Board of Directors through the Human Resources Management Committee, and may be suspended at any time.

We measure individual performance under the ILP using a matrix (or, if such matrix is replaced, another instrument of compulsory distribution) of nine potential and actual performance goals that aims to track whether the individual possesses the necessary skills and potential, and has achieved certain individual targets. The number of phantom shares granted to each beneficiary is based on targets that follow best practices in the market.

In addition, in 2017, we established a new long-term incentive plan, known as the category of plan “*Bônus de Longo Prazo*.” The *Bônus de Longo Prazo* establishes certain targets for receiving bonus payments. These targets and the related bonuses are connected to the Eligible Professional’s position. The *Bônus de Longo Prazo* also aims to incentivize and retain employees who provide the greatest value through their individual performance. The bonus payments under the *Bônus de Longo Prazo* are subject to an adjustment factor based on the average performance of our company during the three year vesting period, which can reduce the Eligible Professional’s bonus by up to 50% or increase the Eligible Professional’s bonus by up to 200%. Under the adjustment factor, our average performance is measured by the EBITDA and net income targets established at the time of the Eligible Professional’s *Bônus de Longo Prazo*. The *Bônus de Longo Prazo* is reviewed annually by our Board of Directors through the Human Resources Management Committee and may be suspended at any time.

As of December 31, 2018, the total expense amount accrued by us related to the long-term incentive plan was R\$20,575 million, of which R\$17,658 million related to the *Bônus de Longo Prazo* and the remainder of R\$2,917 million related to the *ILP*.

Compensation or Benefits Linked to Corporate Events

We provide indemnification for our executive officers in the event of a change of control of our company that results in elimination of the officer’s post, termination of the officer by our Board of Directors or a change in working conditions that is deemed to be a constructive termination. We do not provide any compensation or benefit to members of our Board of Directors or Fiscal Council linked to corporate events.

Pension Plans

We provide pension plans for our executive officers, but not for members of our Board of Directors or Fiscal Council. The table below summarizes our pension plan arrangements regarding executive officers as at and for the year ended December 31, 2018:

Name of pension plan	Pension Plans for Executive Officers	
	PGBL Bradesco	PGBL Brasil Prev
		8.25
Number of Executive Officer members		
Number of Executive Officer members eligible for retirement	4	3

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Early retirement provisions	None	None
Inflation-adjusted value of pension plan contributions held at year-end, excluding contributions made directly by beneficiaries (in thousands of <i>reais</i>)	734	503
Amount of pension plan contributions made during the year, excluding contributions made directly by beneficiaries (in thousands of <i>reais</i>)*	352	217
Provisions for early redemption by beneficiary, if any	At any time, subject to vesting rules	At any time, subject to vesting rules

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(*) Inflation-adjusted.

Share Ownership

The total number of common shares owned by our directors and executive officers as of March 31, 2019 was 189. None of our directors or executive officers beneficially owns one percent or more of our common shares.

Indemnification of Officers and Directors

Neither the laws of Brazil nor our bylaws provide for specific indemnification of directors or officers. We have held directors' and officers' liability insurance since February 2006.

Employees

As of December 31, 2018, we had 13,467 full time employees, all of which were located in Brazil. The following table sets forth the number of our employees and a breakdown of employees by category of activity as of the dates indicated in each area of our operations.

	As of December 31,		
	2018	2017	2016
Distribution	7,340	7,758	7,985
Conventional Generation	89	92	95
Renewable Generation	442	475	430
Commercialization	56	48	48
Services	3,704	3,431	3,102
Corporate staff	1,836	1,540	1,557
Total	13,467	13,344	13,217

Some of our employees are members of unions, with which we have collective bargaining agreements. We renegotiate these agreements annually with the 38 principal unions that represent our various employee groups. Salary increases are generally provided for on an annual basis. We believe that we have good relationships with these unions, as evidenced by the fact that we have not had any labor strikes during the last 30 years that materially affected our operations.

We provide a number of benefits to our employees. The most significant is the sponsorship of Fundação CESP, in partnership with ten other electrical companies, which supplements the Brazilian government retirement and health benefits available to the employees of our subsidiaries CPFL Paulista, CPFL Piratininga, CPFL Geração and CPFL Brasil.

In accordance with Brazilian law and our compensation policy, our employees are eligible for our profit sharing program. This amount is set in the collective bargaining agreements of each company, which are adjusted annually. In 2018, we reserved R\$116 million (R\$96 million of which are booked in current liabilities) for our employee profit sharing program.

In addition, part of each employee's compensation is linked to performance goals. Employees are evaluated based on criteria such as quality of work product, adherence to safety protocols and productivity. Our performance evaluation system is designed to evaluate required skill as well, and enables us to evaluate the development of our employees.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

Major Shareholders

The following table sets forth information relating to the beneficial ownership of our common shares by our major shareholders (beneficial owners of 5.0% or more of our common shares) as of March 31, 2019, reflecting the consummation of the acquisition of control of our company by State Grid. Percentages in the following table are based on 1,017,914,746 outstanding common shares.

	Common Shares	(%)
State Grid Brazil Power Participações S.A. ⁽¹⁾	964,521,902	94.75
Executive officers and directors as a group	189	0.00
Total	964,522,091	94.75

(1) State Grid Brazil Power Participações S.A., or State Grid, is our controlling shareholder. It holds 730,435,698 shares directly (or 71.75%) and 234,086,204 shares indirectly (or 23.00%) through its wholly-owned subsidiary ESC Energia S.A. State Grid Brazil Power Participações S.A. is an indirect subsidiary of State Grid Corporation of China, a state-owned enterprise of the People's Republic of China.

As of March 31, 2019, we had 1,004,264,145 record holders in Brazil, representing 98.7% of our common shares, and 13,650,601 record holders abroad, representing 1.3% of our common shares. As of March 31, 2019, we had 11,358,065 record holders in the United States, representing 1.1% of our common shares.

State Grid acquired control of our company on January 23, 2017. In November 2017, State Grid launched a mandatory tender offer for our shares. Following the closing of this tender offer on December 5, 2017, State Grid jointly with ESC Energia S.A. held 964,521,902 of our common shares, equivalent to 94.75% of our total share capital.

On April 2, 2019, the Company informed the B3 its intention to bring its free float in compliance with *Novo Mercado* rules by carrying out a follow-on offering for its common shares, and on April 18, 2019, B3 approved its request for an extension of the deadline to reach a minimum free float of 15% of its total capital until October 31, 2019. The Company is still considering the terms and conditions of any potential follow-on offering.

The shareholders' agreement that was in effect relating to our shares prior to State Grid Brazil's acquisition of control of our company was terminated in connection with that acquisition. There is currently no shareholders' agreement in place. None of our major shareholders have differentiated voting rights.

Related Party Transactions

We are party to certain related party transactions. These transactions mainly fall into the following categories:

- Purchase and sale of energy and charges: Refers to energy purchased or sold by distribution, commercialization and generation subsidiaries through short or long-term agreements and TUSD. Such transactions, when conducted in the Free Market, are carried out under conditions that we consider to be similar to market conditions at the time of the trading, according to internal policies previously

established by our Management. When conducted in the Regulated Market, the prices charged are set through mechanisms established by the regulatory authority.

Intangible assets, Property, plant and equipment, Materials and Service: Refers to the purchase of equipment, cables and other materials for use in distribution and generation activities and the contracting of services such as construction and information technology consultancy.

Advances: Refers to advances for investments in research and development.

For more information on our related party transactions, see Note 30 to our audited annual consolidated financial statements.

ITEM 8. Financial Information

Consolidated Statements and Other Financial Information

See “Item 18. Financial Statements.”

Legal Proceedings

Proceedings Related to our company and its Subsidiaries

CPFL Paulista and CPFL Piratininga are defendants in numerous proceedings commenced by industrial consumers alleging that certain tariff increases that occurred in the past were illegal. The plaintiffs allege that electricity tariffs were among items subject to a price freeze under financial regulations that were in force at the time. The total amount claimed under these proceedings was R\$204.2 million as of December 31, 2018. This amount consists of R\$48.2 million where we have classified the likelihood of loss as probable; R\$67.5 million where we have classified the likelihood of loss as possible; and R\$88.5 million where we have classified the likelihood of loss as remote. A significant number of these proceedings have been decided against us or our subsidiaries, as applicable. We have made accounting provisions of R\$48.2 million in respect of these proceedings.

CPFL Paulista is a defendant in a class action suit commenced by the Consumer Protection Office (*Promotoria de Defesa do Consumidor - PROCON*) of Campinas in the state of São Paulo, seeking to suspend the tariff adjustment authorized by ANEEL for 2009. The claim against us was rejected by the court of first instance, but the Consumer Protection Office appealed the decision. The tariff adjustment remains in force until a ruling on appeal is made. We believe that the risk of loss in this proceeding is possible and therefore have not recorded any accounting provision in this respect.

CPFL Piratininga is subject to a tax claim regarding alleged improper tax deductions regarding payments made to the Fundação CESP pension fund. The payments in question originated from an agreement by CPFL Piratininga to pay a debt owed by the pension fund. In late 2016, the administrative court rejected CPFL Piratininga’s defense and issued an infraction notice. As a result, CPFL Piratininga filed a new defense in a judicial court. In January 2018, CPFL Piratininga obtained an order at first instance for reconsideration of aspects of the administrative proceeding, although the Brazilian Federal Revenue (*Receita Federal do Brasil*) filed an appeal with respect to which a judgment is pending. The amount claimed in these Fundação CESP proceedings totaled R\$265.3 million as of December 31, 2018. We believe that the likelihood of loss is possible.

CPFL Paulista is subject to a tax claim challenging the deductibility of expenses recognized in 1997 relating to a deficit in the Fundação CESP pension fund. CPFL Paulista deducted the expenses for income tax purposes in reliance on a favorable opinion from the Brazilian tax authority. We made a payment to the court of R\$360 million in 2007 and R\$54 million in 2011 in order to prevent any attachment of assets by the tax authority and enable CPFL Paulista to appeal the claim. By year-end 2015, these payments as adjusted for inflation amounted to R\$746 million. In January 2016, CPFL Paulista obtained court decisions that authorized CPFL Paulista to replace these escrow deposits with financial guarantees (letter of guarantee and performance bond), following which CPFL Paulista was able to withdraw the deposits in 2016. In February 2017, following a decision on appeal, CPFL Paulista paid into court a new escrow deposit in the amount of R\$206.8 million (adjusted to R\$237.5 million as of December 31, 2018 to account for inflation), related to the interest accrued on the original escrow deposits. This tax claim has also resulted in other execution proceedings, which together total R\$1.2 billion, which remain subject to decisions by higher courts. We believe that the likelihood of loss is possible.

CPFL Paulista commenced proceedings against ANEEL in 2007 seeking annulment of the methodology applied in periodic tariff adjustments since the first periodic adjustment cycle in 2003, on the basis that the adjustments affected the economic basis of CPFL Paulista's concessions. Following denial of its claim by the court of first instance, CPFL Paulista appealed and the court of second instance ruled in favor of CPFL Paulista, returning the lawsuit to the original court. The case is currently awaiting the start of an additional investigation by a court appointed expert. In addition, ABRADÉE, a group of electricity distribution companies that includes CPFL Paulista, CPFL Piratininga and RGE, commenced proceedings against ANEEL in 2002 challenging the basis for remuneration of concession assets that has been in effect since the first periodic adjustment cycle. We are currently awaiting a final decision in these proceedings. If the relevant distribution companies succeed in any of these proceedings, the tariffs that they may charge will increase. If the distribution companies lose the cases, however, they may be required to pay court costs as well as legal fees that will be arbitrated by the court to ANEEL. We believe that the likelihood of loss in both proceedings is possible.

CPFL Geração and Furnas are subject to legal proceedings commenced by Mr. Alberto Vieira Borges and others. The claim relates to the Serra da Mesa joint venture, in which CPFL Geração and Furnas were joint venture partners, although the concession for the Serra da Mesa project is held by Furnas alone. The plaintiffs, who were owners of a lumberyard, seek compensation of R\$2.1 billion as of December 31, 2018 on the basis that the Brazilian environmental agency prevented them from felling their trees before the area was flooded as part of the construction of the Hydroelectric Facility, and therefore that the Serra da Mesa joint venture expropriated the timber.

In September 2018, a decision was issued ruling that the plaintiffs' requests were unfounded and recognizing that the statute of limitations had expired on their claims. We are currently waiting for confirmation that the plaintiffs will not file an appeal. We believe that the likelihood of loss is remote.

CPFL Geração is subject to a tax claim in the amount of R\$416 million as of December 31, 2018 regarding an interpretation of the basis for calculation of PIS and COFINS taxes due. A ruling was issued in the administrative proceeding against CPFL Geração on all counts. As a result, CPFL Geração initiated a judicial proceeding against the Brazilian federal government. In March 2018, a decision favorable to CPFL Geração was issued in the first judicial instance. The Brazilian federal government appealed such decision, and we are currently waiting for a decision in the second judicial instance. We believe that the likelihood of loss is possible.

RGE has filed a petition to cancel an infraction notice in the amount of R\$535 million as of December 31, 2018 regarding IRPJ and CSLL levied in relation to the period from 1999 to 2003. The claim alleges excess goodwill amortization in the 10-year period under Law 9,532/97; excess asset depreciation charges; and the exclusion from the basis of tax calculation of certain inflation-related adjustments to items within Parcel A, known as CVA. RGE is awaiting a court decision on its challenge to this claim. We believe that the likelihood of loss is possible. This claim has generated four separate administrative proceedings. In 2016, RGE filed a claim to suspend all three of these administrative proceedings until the decision on the underlying tax claim is issued, as the result of this claim indirectly affects the other proceedings, despite the fact that they relate to different periods. The likelihood of loss in these proceedings is possible and the potential losses amount to R\$176 million as of December 2018.

CPFL Santa Cruz (two proceedings), CPFL Geração (three proceedings) and RGE (two proceedings) are also subject to tax claims in the amounts of R\$109 million, R\$451 million and R\$389 million, respectively, as of December 31, 2018, alleging excess goodwill amortization for purposes of calculating IRPJ and CSLL taxes. Our appeals in this case are awaiting decision. We believe that the likelihood of loss in all of the proceedings is possible.

CPFL Paulista is subject to several tax collection proceedings filed by the city of Ribeirão Preto, charging land use taxes for the years of 2005, 2007, 2008, 2009 and 2014. We have submitted a defense for this claim, which was accepted due to previously recognized unconstitutionality of the tax. Currently, we are waiting for the judgment of several appeals filed by the city of Ribeirão Preto. We believe that the likelihood of loss is remote. Following a successful partial decision in favor of CPFL Paulista in 2017, the amount claimed totaled R\$334 million as of December 31, 2018. In February 2018, the city of Ribeirão Preto withdrew one of its claims in the amount of R\$194 million.

Sul Geradora is subject to a tax claim in the amount of R\$109 million as of December 31, 2018 regarding an infraction notice drawn up to collect income tax retained at the source (*Imposto de Renda Retida na Fonte*), or IRRF, on the payment of interest on an export prepayment transaction. Tax authorities claim that Sul Geradora used the funds obtained from the transaction to acquire credits against companies within its own economic group and not to fund its exports. The infraction notice was upheld in the administrative proceeding and a decision was issued ruling against Sul Geradora on all counts. As a result, Sul Geradora filed an ordinary proceeding in the judicial sphere seeking to revoke the infraction notice. The judicial proceeding is currently pending trial in the first instance. We

believe the likelihood of loss is possible.

CPFL Piratininga has commenced proceedings against the Brazilian Federal Revenue seeking the right to deduct in full the value of the CSLL based on the income tax (*Imposto sobre a Renda*) for the 2002 base year and all subsequent years. The initial request and CPFL Piratininga's appeal were both denied. CPFL Piratininga then applied for a special and extraordinary appeal, both of which were denied in December 2017. As a result of these denials, the original decision is now final and enforceable. We have deposited the full amount into judicial escrow and will now begin the process to calculate the exact amount payable, which we believe amounts to R\$169 million as of December 31, 2018.

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CPFL Geração is subject to a tax claim in the amount of R\$414 million as of December 31, 2018 regarding an infraction notice related to the collection of IRRF and CSLL. Tax authorities claim that CPFL Geração made capital gains and applied an incorrect tax basis on the merger of SMITA Empreendimentos e Participações S.A. into ERSÁ – Energias Renováveis S.A., which resulted in the creation of CPFL Renováveis in 2011. CPFL Geração filed an objection in January 2017. In August 2017, a decision was issued in the first instance ruling against CPFL Geração's objection, fully upholding the infraction notice. CPFL Geração then filed a voluntary appeal aiming to cancel the infraction notice in full. This appeal is currently pending a decision in the second instance by the Administrative Council on Fiscal Resources (*Conselho Administrativo de Recursos Fiscais* – CARF). We believe the likelihood of a loss is possible.

CPFL Paulista is the defendant in an indemnification proceeding for material damages and loss of profits commenced by Mr. Sebastião José Ismael, alleging an undue reduction in energy affecting his irrigation system for palm heart plants. CPFL Paulista made payments relating to the alleged damage and is currently in arbitration regarding the amount of any loss of profits. We believe the likelihood of a loss is probable up to R\$6.6 million, possible up to R\$111 million and remote up to R\$32 million in December 2018.

CPFL Piratininga is the defendant in an environmental proceeding commenced by the Attorney-General of the state of São Paulo seeking to modify existing maintenance criteria on 10 transmission lines that run close to the preserved area of Parque Estadual da Serra do Mar because of the destruction of vegetation. We believe the risk of loss is possible but the amount involved cannot currently be estimated because the lawsuit remains in the initial stages and the extent of any losses to or obligations of CPFL Piratininga will depend on an environmental report and the judge's review, which has not yet been performed or occurred.

RGE is a defendant in a Public Civil Action (*Ação Civil Pública*) that challenged RGE's practice of subcontracting maintenance services on electric energy networks. On February 2, 2017 the court ruled that RGE must refrain from outsourcing activities related to its core business, but rejected the public prosecutor's class action claim. We believe the likelihood of loss is possible, in the amount of R\$219.8 million as of December 31, 2018. In March 2018, the court issued a decision on appeals filed by both parties, although the proceedings remain subject to ongoing appeal. A new Labor Reform law promulgated on November 11, 2017 now permits the outsourcing activities that gave rise to the initial claim. We still believe the likelihood of loss is possible.

RGE is subject to a tax claim in the amount of R\$430.5 million as of December 31, 2018 by the State Treasury of Rio Grande do Sul. The claim refers to two infraction notices relating to the collection of ICMS from February 2013 to August 2018 on subsidy installments received from the Brazilian federal government for indemnities paid due to the contractual imbalance resulting from the discount fixing for certain classes of clients. RGE filed an administrative proceeding against both infraction notices in January 2019 and a decision is currently pending. We understand that the possibility of loss is possible.

RGE is party to certain proceedings brought by the public prosecutor's office challenging the validity of RGE's tariff composition. RGE monitors these proceedings since they relate to events that occurred prior to our acquisition of RGE Sul, although we are not responsible for the management of these cases. Of these proceedings, we consider two material based on their potential impact in the event of a ruling against RGE. These proceedings are: (i) a proceeding which challenges the totality of the tariff composition and would require the complete refund of previously paid amounts and (ii) a proceeding challenging the tariff policy as established by law and the tariff readjustment methodology, adopted by ANEEL in 2002. We have received favorable judgments in both proceedings in the first instance. Both proceedings were then appealed by the public prosecutor's office and, in both cases, we are currently awaiting judgment. We understand that the likelihood of loss from these proceedings is remote. The value of any potential loss cannot be estimated at this time.

RGE is a defendant in a declaratory action of administrative impropriety filed by the state of Rio Grande do Sul and CEEE on February 22, 2001 discussing CEEE's corporate restructuring process for subsequent privatization, including the MME, the President of CEEE, the Financial Director of CEEE, the Administrative Director of Companhia Centro-Oeste de Distribuição de Energia Elétrica – CCODEE (RGE) and Companhia Norte-Nordeste de Distribuição de Energia Elétrica – CNNDEE (RGE Sul) and the accountants who signed the appraisal report. In its defense, RGE alleged illegitimacy lack of participation and responsibility in the discussions, considering that the corporate restructuring happened before the RGE and RGE Sul concessions were acquired, as well as the non-existence of damage to the seller, considering that RGE and RGE Sul concessions were acquired at a higher price than the initial evaluation. The lawsuit is currently pending instruction and we understand that the likelihood of loss in this proceeding is possible and estimated at R\$58 million, with respect to one of the concessions, and remote and estimated at R\$308 million, with respect to the other of the concession, as of December 31, 2018.

In 2014, a class action was filed by the Sport Fishing Association against the National Environmental Agency, the Brazilian Institute of Environment and Renewable Natural Resources (*Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis*), Furnas and CPFL Geração aiming to oblige the defendants to repair and mitigate the environmental impacts caused by the construction and operation of the Serra da Mesa Hydroelectric Power Plant, based on the alleged damming of the Tocantins River. In September 2017, CPFL Geração obtained a favorable decision in the first instance. We are currently awaiting judgment of the plaintiffs' appeal. We understand that the likelihood of loss of this proceeding is remote and estimated at R\$ 329 million as of December 31, 2018.

We establish balance sheet provisions relating to potential losses from litigation based on estimates of such losses. For this purpose, we classify these losses as remote, possible or probable. IFRS practices require us to establish provisions in connection with probable losses, and it is therefore our policy to establish provisions in connection with those claims only. As of December 31, 2018, our provisions for contingencies were R\$979 million, reflecting our ongoing contingency monitoring and risk control. Our Management believes that none of these proceedings, either individually or in the aggregate, will have a material adverse effect on our financial condition. See Note 21 to our audited annual consolidated financial statements for more information on the status of our litigation.

Proceedings Related to our Fiscal Council

An alternate member to our fiscal council, Reginaldo Ferreira Alexandre, is involved in a proceeding with the CVM involving members of the executive board, board of directors and fiscal council of Petróleo Brasileiro S.A., or Petrobras, and relating to irregularities and inconsistencies in the preparation of certain impairment tests reflected in Petrobras's financial statements for 2013. Reginaldo Ferreira Alexandre served on Petrobras's fiscal council during the period in question. The CVM has stated that the supervisory board should have issued an opinion against the approval of the 2013 financial statements, citing the possibility of these irregularities and inconsistencies. This proceeding is currently pending judgment.

Dividends

See "Item 10. Additional Information—Allocation of Net Income and Distribution of Dividends" for information on our dividend distributions.

ITEM 9. The Offer and Listing

Trading Markets

Our common shares are listed on the B3 under ticker CPFE3, and our ADSs are listed on the New York Stock Exchange under ticker CPL. Each ADS represents two shares. The ADSs commenced trading on the NYSE on September 29, 2004. As of December 31, 2018, the ADSs represented 0.95% of our shares and 18.02% of our current global public float.

State Grid acquired control of our company on January 23, 2017. In November 2017, State Grid launched a mandatory tender offer for our shares. Following the closing of this tender offer on December 5, 2017, State Grid

jointly with ESC Energia S.A. held 964,521,902 of our common shares, equivalent to 94.75% of our total share capital.

On April 2, 2019, the Company informed the B3 its intention to bring its free float in compliance with *Novo Mercado* rules by carrying out a follow-on offering for its common shares, and on April 18, 2019, B3 approved its request for an extension of the deadline to reach a minimum free float of 15% of its total capital until October 31, 2019. The Company is still considering the terms and conditions of any potential follow-on offering.

Corporate Governance Practices

In 2000, the B3 (at that time known as BM&FBOVESPA) introduced three special listing segments, known as Level 1, Level 2 and the *Novo Mercado*, aiming at fostering a secondary market for securities issued by Brazilian companies with securities listed on the B3, by prompting such companies to follow good practices of corporate governance. The listing segments were designed for the trading of shares issued by companies voluntarily undertaking to abide by corporate governance practices and disclosure requirements in addition to those already imposed by Brazilian law. These rules generally increase shareholders' rights and enhance the quality of information provided to shareholders and stakeholders. In order to maintain high standards of corporate governance, we have signed an agreement with the B3 to list our securities on the *Novo Mercado*.

Our corporate governance guidelines apply to us and all of our subsidiaries and affiliated companies. They aim at promoting interaction among our shareholders, Board of Directors, Fiscal Council and Board of Executive Officers. Our Management has committed to focus on:

1. Transparency/Disclosure – the desire to provide stakeholders with information that is of interest to rather than simply required by law or regulation.
2. Impartiality/Fairness – fair and equal treatment of all shareholders and other stakeholders, taking into consideration their rights, duties, needs, interests and expectations.
3. Accountability – provision of information by our Management in a clear, concise, understandable and timely manner, assuming the consequences of their acts and omissions in full, and performing their roles diligently and responsibly.
4. Corporate responsibility/Compliance – complete focus on economic and financial viability of our company, the reduction of negative externalities impacting our businesses and operations and the increase in positive externalities, while taking into account the various types of capital (financial, manufactured, intellectual, human, social, environmental, reputational, etc.) in the short-, medium- and long-term.

We implemented this model in 2003 and redesigned it in 2017 in order to adjust our corporate governance structure to the current making-business scenario and decision-making process, as well as to consider our new corporate structure. In December 2017, our Board of Directors approved the revision of our Corporate Governance Guidelines as related to their application to our controlled and affiliated companies. In addition, in 2012, it was registered that the members of the Board of Directors' Advisory Committees shall no longer receive compensation. In 2017, the Board of Directors approved an amendment to our Corporate Governance Guidelines, which specifies that the internal audit and corporate governance advisors report directly to the Board of Directors. The corporate governance advisors shall report to the Board through the Corporate Governance Department.

Our Board of Directors is our decision-making body, responsible for determining our overall guidelines. Our Board of Directors can request advice on strategic matters from three of our committees, such as executive remuneration, related party transactions, follow-up on internal audits, business management processes, corporate risk management, sustainability and financial policies. Whenever necessary, *ad hoc* commissions are installed to advise the Board of Directors on specific issues, such as strategies, budget, new operations, financial policies, etc.

A revision of these rules was under discussion between the companies listed in each segment and the B3, and it was approved during the second half of 2010 to provide for a further enhancement of the special corporate governance and disclosure rules. The revised rules entered in force and effect on May 10, 2011, including those related to the *Novo Mercado* segment. The main changes to the rules in the segment that we are listed include, among others: (i) prohibition to include dispositions that restrict or create obligations to the shareholders which vote favorably to a suppression or amendment of dispositions of the bylaws; (ii) prohibition of the same individual to hold the positions of chairman of the board of directors and chief executive officer (or equivalent position as the main executive of the

company); and (iii) obligation of the board of directors to issue a justified opinion on any tender offers for the acquisition of the shares representative of the corporate capital of the company. On December 19, 2011, we amended our bylaws to incorporate these rules, among other changes. In 2013 we amended our bylaws to include the creation of a “Reserve for Adjustment of the Concession Financial Assets,” with subsequent amendment to items “a” and “c” and addition of items “d” and “e” of paragraph 2, Article 27. In 2015, we amended our bylaws, in order to include: (i) a capital increase through the capitalization of profit reserves, with consequent stock bonus; (ii) modifications in the composition of the Board of Executive Officers; (iii) modifications in the scope of powers to approve certain matters by the Board of Executive Officers; (iv) monetary adjustment of values expressly determined by the bylaws; and (v) language improvements and inclusion of cross references for improved understanding of the bylaws.

In 2017, an additional revision of the rules applicable to companies listed in *Novo Mercado* was discussed and approved. The revised rules, which became effective on January 2, 2018, include, among others: (i) the board of directors must have at least two independent directors or 20% of the board of directors as independent, whichever is greater; (ii) required preparation and disclosure of: (a) compensation policy; (b) policy for the appointment of members of the board of directors, its advisory committees and the statutory executive officers; (c) risk management policy; (d) related party transactions policy; and (e) securities trading policy; (iii) material facts (*fatos relevantes*), information on benefits and communication of results in the form of press releases should be published simultaneously in Portuguese and English, except in the event of disclosure of a material fact as a result of information leakage or atypical movements in trading price; and (iv) required preparation and approval by the board of directors of a code of conduct.

On June 8, 2017, the CVM altered the rules applicable to publicly-held companies. These revisions created an obligation for companies to annually inform the CVM of their corporate governance practices, as recommended by the Brazilian Corporate Governance Code – Publicly Held Companies (*Código Brasileiro de Governança Corporativa – Companhias Abertas*). The Brazilian Corporate Governance Code – Publicly Held Companies is divided in different principles, which are considered the essential values of corporate governance, and adopts a system of “comply or explain.” Therefore, companies have to evaluate their practices and principles based on the Brazilian Corporate Governance Code – Publicly Held Companies and disclose whether they comply with the recommendation or explain the reasons why they did not adopt such principle.

In accordance with Section 303A.11 of the NYSE Listed Company Manual, we have posted a summary of significant differences between the NYSE corporate governance standards and our corporate governance practices on our website, at <http://www.cpfl.com.br/ir>.

In parallel, ANEEL issued Normative Resolution No. 787/2017, effective for a two-year trial period as of January 1, 2018 and in full force as of January 1, 2020, which is intended to evaluate the quality of corporate governance of electricity distribution companies according to five criteria, namely (i) transparency, (ii) top management structure, (iii) ownership and controlling relationships, (iv) internal control and (v) regulatory compliance. Under this resolution, electricity distribution companies will be classified as “high,” “average,” “insufficient” or “non applicable,” reflecting the level of regulatory scrutiny to which the companies will be subject. Companies listed in special segments in B3 such as the *Novo Mercado*, Level 1, Level 2 and Bovespa Mais may be classified as “high” if they comply with the standards of the first four criteria (transparency, top management structure, ownership and controlling relationships and internal control).

ITEM 10. Additional Information

Memorandum and Articles of Incorporation

Corporate Purpose

Our corporate purpose, as defined by our bylaws, includes:

- fostering enterprises in the electricity generation, distribution, transmission, sale industry and related activities;

- providing services related to electricity, as well as providing technical, operational, administrative and financial support services, especially to affiliated or subsidiary companies; and
- holding interest in the capital of other companies engaged in activities similar to those that we perform or which have as corporate purpose fostering, building, and/or operating projects concerning electricity generation, distribution, transmission, commercialization and its related services.

Qualification of Directors and Executive Officers

Members of our board of executive officers must be residents of Brazil, but such requirement does not apply to members of our Board of Directors.

Allocation of Net Income and Distribution of Dividends

The discussion below summarizes the provisions of Brazilian law regarding the establishment of reserves by corporations and the distribution of dividends, including interest attributable to shareholders' equity.

Mandatory Distribution

Brazilian Corporate Law generally requires that the bylaws of each Brazilian corporation specify a minimum percentage of the amounts available for distribution by such corporation for each fiscal year that must be distributed to shareholders as dividends, also known as the mandatory distribution.

Under our bylaws, at least 25.0% of our adjusted net income, as calculated under Brazilian Accounting Principles and adjusted under Brazilian Corporate Law, for the preceding fiscal year must be distributed as a mandatory annual dividend. Adjusted net income means the distributable amount after any deductions for statutory reserves and reserves for investment projects.

Under our bylaws, the net profit for the preceding fiscal year, as calculated under Brazilian Accounting Principles and adjusted under Brazilian Corporate Law, shall be allocated as follows: (i) 5.0%, before any other allocation, to form the legal reserve, until it reaches 20.0% of CPFL Energia's capital stock (under Brazilian Corporate Law, we are not forced to make any allocation to the legal reserve in relation to any fiscal year in which the sum of the legal reserve and certain capital reserves exceeds 30.0% of CPFL Energia's capital stock); (ii) payment of mandatory dividends; (iii) the remaining profit, except as otherwise resolved by the Shareholders' Meeting, shall be allocated to the working capital reinforcement reserve, the total of which shall not exceed the amount of the subscribed capital stock; and (iv) in the event of loss in the year, the accrued reserves may be used to absorb the remaining loss, after absorption by the other reserves, with the legal reserve.

Brazilian Corporate Law permits the suspension of the mandatory distribution of dividends in any fiscal year in which the Management bodies report to the shareholders' meeting that the distribution would be inadvisable in view of the company's financial condition. The suspension is subject to approval by the shareholders' meeting and review by members of the fiscal council, if it has been installed. The law does not establish the circumstances in which payment of the mandatory dividend would be "inadvisable" based on the company's financial condition. In the case of publicly-held corporations, the board of directors must file a justification for such suspension with the CVM within five days of the relevant general meeting. If the mandatory distribution is not paid, the unpaid amount must be attributed to a special reserve account. If not absorbed by subsequent losses, those funds must be paid out as dividends as soon as the financial condition of the company permits. Under Brazilian Corporate Law, the shareholders of a publicly-held company may also, through a unanimous decision in a General Shareholders' Meeting, decide to distribute dividends in an amount lower than the mandatory distribution or retain the net profit exclusively for purposes of fundraising by means of non-convertible debentures.

Payment of Dividends

We are required by Brazilian Corporate Law to hold an annual general shareholders' meeting by no later than April 30 of each year, at which the shareholders have to decide, among other matters, on the payment of an annual dividend. Additionally, interim dividends may be declared by our Board of Directors. Any interim dividend paid may be set off against the amount of the mandatory dividend payable for the fiscal year in which the interim dividend was paid.

Pursuant to our charter, we are required to pay a mandatory annual dividend of at least 25.0% of our adjusted net income. Any holder of record of shares at the time of a dividend declaration is entitled to receive dividends. Dividends on shares held through a depository are paid to the depository for further distribution to the shareholders. Under Brazilian Corporate Law, dividends are generally required to be paid to the holder of record on a dividend declaration date within 60 days following the date the dividend was declared, unless a shareholders' resolution sets forth another date of payment, which, in either case, must occur prior to the end of the fiscal year in which such dividend was declared. Pursuant to our bylaws, declared unclaimed dividends do not bear interest, are not monetarily adjusted and revert to us if unclaimed within three years after the date when we begin to pay such declared dividends.

In general, shareholders who are not residents of Brazil must register their equity investment with the SISBACEN to have dividends, sales proceeds or other amounts with respect to their shares eligible to be remitted outside of Brazil. The common shares underlying the ADSs are held in Brazil by Banco do Brasil S.A. as of January 1, 2011. The depository registers the common shares underlying the ADSs with the SISBACEN and, therefore, is able to have dividends, sales proceeds or other amounts with respect to the common shares remitted outside Brazil.

Payments of cash dividends and distributions, if any, are made in *reais* to the custodian on behalf of the depository, which then exchanges such proceeds for U.S. dollars for distribution to holders of ADSs. In the event that the custodian is unable to convert immediately the Brazilian currency received as dividends into U.S. dollars, the amount of U.S. dollars payable to holders of ADSs may be adversely affected by depreciations of the Brazilian currency that occur before the dividends are converted. Dividends paid to persons who are not Brazilian residents, including holders of ADSs, are not subject to Brazilian withholding income tax, except for (i) dividends declared based on profits generated prior to December 31, 1995 and (ii) in 2014 dividends possibly paid in excess, due to a difference in the calculation of profits resulting from a change of accounting standards adopted in Brazil, which are subject to Brazilian withholding income tax at varying or profits tax rates. See “—Brazilian Tax Considerations” for more information.

Holders of ADSs have the benefit of the electronic registration obtained with the SISBACEN, which permits the depository and the custodian to remit proceeds related to dividends and other distributions or sales proceeds with respect to the common shares represented by ADSs outside of Brazil. In the event the holder exchanges the ADSs for common shares, the holder will need to update the shareholder's registration with the SISBACEN and enter into simultaneous foreign exchange transactions (without the effective remittance of funds) in order to re-enable the remittance of proceeds related to dividends and other distributions or sales. In order to do so, the holder must be a duly qualified investor under Resolution No. 4,373 by registering with the CVM and the Brazilian Central Bank and appointing a representative in Brazil.

If the holder is not a duly qualified investor and does not follow the procedures indicated in the above paragraph, he or she will not be able to exchange the ADS for common shares or to remit abroad any proceeds relating to dividends and other distributions or sales.

Under current Brazilian legislation, the Brazilian government may impose temporary restrictions of foreign capital abroad in the event of a serious imbalance or an anticipated serious imbalance of Brazil's balance of payments (see “Item 3. Key Information—Risk Factors—Risks Relating to the ADSs and Our Common Shares”).

Interest Attributable to Shareholders' Equity

Under Brazilian tax legislation, Brazilian companies are permitted to make distributions to shareholders of interest attributable to shareholders' equity and treat such payments as a deductible expense for purposes of calculating Brazilian corporate income tax and social contribution on net profits. Payment of such interest may be made at the

discretion of our Board of Directors, subject to the approval of the shareholders at a general shareholders' meeting. In order to calculate this interest attributable to shareholders' equity, the TJLP is applied to certain equity accounts for the applicable period. The deduction of the interest attributable to shareholders' equity payments for IRPJ and CSLL purposes is limited to the greater of:

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- 50.0% of net income (determined after the deduction of the provisions for social contribution on net profits but before taking into account the provision for corporate income tax and the interest attributable to shareholders' equity) for the period in respect of which the payment is made; or
- 50.0% of the accrued profits and profit reserves as of the beginning of the year in respect of which such payment is made.

As a general rule, the payment of interest attributable to shareholders' equity to non-Brazilian holders is subject to Brazilian withholding tax at the rate of 15.0%, or 25.0% in the non-Brazilian holder is domiciled in a jurisdiction defined as a "Low or Nil Tax Jurisdiction." See "—Brazilian Tax Considerations" for more information. If such payments are accounted for, at their net value, as part of any mandatory dividend, the tax is paid by the company on behalf of its shareholders, upon distribution of the interest (gross up). If we distribute interest attributable to shareholder's equity in any year, and that distribution is not accounted for as part of mandatory distribution, Brazilian income tax would be borne by the shareholders. For accounting purposes, interest attributable to shareholders' equity is reflected as a dividend payment.

Under our bylaws, interest attributable to shareholders' equity may be treated as a dividend for purposes of the mandatory dividend.

No assurance can be given that our Board of Directors will not recommend that future distributions of profits should be made by means of interest attributable to shareholders' equity instead of by means of dividends.

Distributions

We do not currently have a dividend policy. However, we intend to declare and pay dividends and/or interest attributable to shareholders' equity in amounts of at least 25.0% of our adjusted net income, in annual installments. The amount of any of our distributions of dividends and/or interest attributable to shareholders' equity will depend on a series of factors, such as our financial conditions, prospects, macroeconomic conditions, tariff adjustments, regulatory changes, growth strategies and other matters our Board of Directors and our shareholders may consider relevant. In addition, covenants contained in our debt instruments may limit the amount of dividends and/or interest attributable to shareholders' equity that we may make. Within the context of our tax planning, we may in the future determine that it is to our benefit to distribute interest attributable to shareholders' equity in lieu of dividends.

Our Board of Directors may approve the distribution of dividends and/or interest attributable to shareholders' equity, calculated based on our annual or semi-annual financial statements or on financial statements relating to shorter periods, or also based on accrued profits recorded or on profits allocated to non-profits reserve accounts in the annual or semi-annual financial statements. The declaration of annual dividends, including dividends in excess of the mandatory distribution, requires approval by the vote of the majority of the holders of our common shares.

Shareholder Meetings

Actions to be taken at our shareholders' meetings

At our shareholders' meetings, shareholders are generally empowered to take any action relating to our corporate purpose and to pass such resolutions as they deem necessary. Shareholders' meetings may be ordinary, such as the annual meeting, or extraordinary. The approval of our financial statements and the determination of the allocation of our net profits with respect to each fiscal year take place at the annual shareholders' meeting immediately following such fiscal year. The election of our directors and members of our fiscal council (and the definition of the aggregate compensation to be paid to the members of the Board of Directors, the fiscal council and the executive officers), if the requisite shareholders request its establishment, typically takes place at the annual shareholders' meeting, although under Brazilian law it may also occur at a special shareholders' meeting.

A special shareholders' meeting may be held concurrently with the annual shareholders' meeting. The following actions, among others provided under Brazilian Corporate Law and/or our bylaws, may only be taken at a special shareholders' meeting:

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the cancellation of the registration with the CVM as a publicly-held company;

suspension of the rights of a shareholder who has violated Brazilian Corporate Law or our bylaws;

acceptance or rejection of the valuation of in-kind contributions offered by a shareholder in consideration for shares of our capital stock;

approval of our transformation into a limited liability company (*sociedade limitada*) or any other corporate form;

the delisting of our shares from the *Novo Mercado* of the B3;

the appointment of a specialized firm to determine the economic value of our company's shares, in the event of a public offering as contemplated under Chapters VIII and IX of the bylaws, based on a list of three selected firms provided by the Board of Directors;

approval of our participation in a group of companies (*grupo de sociedades*, as defined in Brazilian Corporate Law);

approval of the dissolution of CPFL Energia;

reduction of capital stock;

the increase in CPFL Energia's capital stock, as well as the issuance of convertible debentures or subscription warrants (*bônus de subscrição*) beyond the limits of the authorized capital;

authorization to petition for bankruptcy or judicial or extrajudicial restructuring (*recuperação judicial ou extrajudicial*);

the plans for the granting of stock options to members of management and employees of our company and companies directly or indirectly controlled by our company, without the preemptive rights by the shareholders; and

amendment of our bylaws.

According to Brazilian Corporate Law, neither a company's bylaws nor actions taken at a shareholders' meeting may deprive a shareholder of certain specific rights, such as:

the right to participate in the distribution of profits;

the right to participate in any remaining residual assets in the event of liquidation of the company;

the right to inspect and monitor our Management, in accordance with the Brazilian Corporation Law;

the right to preemptive rights in the event of subscription of shares, convertible debentures or subscription warrants (*bônus de subscrição*), except in some specific circumstances under Brazilian law described in "—Preemptive Rights;" and

the right to withdraw from our company in the cases specified in Brazilian Corporate Law, described in "—Withdrawal Rights."

Quorum

As a general rule, Brazilian Corporate Law provides that a quorum for purposes of holding a shareholders' meeting shall consist of shareholders representing at least 25.0% of a company's issued and outstanding voting capital on the first call and, if that quorum is not reached, any percentage on the second call. There are certain exceptions to the general rule, as in the case of a shareholders' meeting with the purposes of amending our bylaws, which shall only be held with the presence of shareholders representing at least two-thirds of our issued and outstanding voting capital on

the first call and any percentage on the second call.

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As a general rule, the affirmative vote of shareholders representing at least the majority of our issued and outstanding common shares present in person or represented by proxy or casting votes remotely (subject to the conditions provided under Brazilian Corporate Law) at a shareholders' meeting is required to ratify any proposed action, with abstentions not taken into account. However, other qualified quorums may be imposed under Brazilian Corporate Law and the bylaws. An example of an exception is the requirement under Brazilian Corporate Law due to which the affirmative vote of shareholders representing at least one-half of our issued and outstanding voting capital is required to, among other matters:

- reduce the percentage of mandatory dividends;
- change our corporate purpose;
- merge us with another company or consolidate us with another company;
- spin off a portion of our assets or liabilities;
- approve our participation in a group of companies (as defined in Brazilian Corporate Law);
- apply for cancellation of any voluntary liquidation; and
- approve our dissolution.

According to our bylaws and for so long as we are listed on the *Novo Mercado*, we may not issue preferred shares or founders' shares and, to delist ourselves from the *Novo Mercado*, we will have to conduct a tender offer.

Notice of our Shareholders' Meetings

Notice of our shareholders' meetings must be published at least three times in the *Diário Oficial do Estado de São Paulo*, the official newspaper of the state of São Paulo, and in the newspaper *Valor Econômico*. The first notice must be published no later than 15 days before the date of the meeting on the first call, and no later than eight days before the date of the meeting on the second call. However, in certain circumstances, the CVM may require that the first notice be published 30 days in advance of the meeting. The call notice must contain the date, time, place and agenda of the meeting, and in case of amendments to the bylaws, the indication of the relevant matters. CVM Rule No. 481, of December 17, 2009, as amended, or CVM Rule No. 481, requires that additional information is disclosed in the meeting call notice for certain matters. For example, in the event of an election of directors, the meeting call notice shall disclose, among other information, the minimum percentage of equity interest required from a shareholder to request the adoption of multiple voting procedures, as well as the relevant ballot paper for casting votes remotely.

Documents and Information

The specific documents and information requested for the exercise of the voting rights of our shareholders shall be made available by electronic means at the CVM and the U.S. Securities and Exchange Commission websites, as well as at our investor relations website. The following matters, without prejudice to others provided under Brazilian Corporate Law, require specific documents and information:

- matters with interest of related parties;
- ordinary Shareholders' Meeting;

- election of members of the Board of Directors;
- compensation of the Management of our company;
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- amendment to our company's bylaws;
- capital increase or capital reduction;
- issuance of debentures or subscription bonuses;
- issuance of preferred shares;
- reduction of the mandatory dividend distribution;
- acquisition of the control of another company;
- appointment of evaluators;
- any matter which entitles the shareholders to exercise their withdrawal right; and
- merger, spin-off, stock swap merger or consolidation with at least one publicly-held company enrolled with the CVM in a certain category (category A).

Location of our Shareholders' Meetings

Starting in 2018, our shareholders' meetings began to take place in the company's new headquarters, in the city of Campinas, in the state of São Paulo. Brazilian Corporate Law allows our shareholders to hold meetings outside our head offices in the event of force majeure, provided that the meetings are held in the city of Campinas and the relevant notice contains a clear indication of the place where the meeting will occur.

Who May Call our Shareholders' Meetings

Subject to the provisions of the Brazilian Corporate Law and our bylaws, our Board of Directors may ordinarily call our shareholders' meetings. These meetings may also be called by:

- any shareholder, if our directors fail to call a shareholders' meeting within 60 days after the date they were required to do so under applicable laws and our bylaws;
- shareholders holding at least five percent of our capital stock, if our directors fail to call a meeting within eight days after receipt of a request to call the meeting by those shareholders indicating the proposed agenda; and
- our fiscal council, if the Board of Directors delays calling an annual shareholders' meeting for more than one month. The fiscal council may also call a special shareholders' meeting any time if it believes that there are important or urgent matters to be addressed.

Conditions of Admission

Shareholders attending our shareholders' meeting must provide their identification cards and produce proof of ownership of the shares they intend to vote.

A shareholder may be represented at a shareholders' meeting by a proxy, as long as the proxy is appointed less than a year before the shareholders' meeting. The proxy must be a shareholder, an officer of the corporation, a lawyer or, in certain cases, a financial institution. An investment fund must be represented by its investment fund officer. The

company and/or its shareholders may also carry out a public proxy request directed to all shareholders with voting rights, subject to certain procedures governed by Brazilian Corporate Law. For shareholders who are legal persons, in accordance with the understanding of the Joint Committee of the CVM issued in a meeting held on November 4, 2014 (CVM Proceeding RJ2014/3578), there is no need for the proxy to be (i) a shareholder or manager of the company, (ii) a lawyer or (iii) a financial institution.

Recent amendments to CVM Rule No. 481 have also ruled, among other provisions, the right of our shareholders casting votes remotely. For such purposes and subject to certain procedures governed by Brazilian Corporate Law, (i) we are requested to provide our shareholders, up to one month before the date scheduled for certain shareholders' meetings, with the ballot paper to cast votes remotely, and (ii) our shareholders are requested to send back the relevant ballot paper directly to us (by post or e-mail), or by giving instructions to certain authorized services providers, no later than seven days before the date scheduled for the shareholders' meeting. In the case of instructions given to authorized services providers, such authorized services providers may accept instructions by any means that they usually use to communicate with the shareholders and also refuse to accept voting instructions from shareholders according with their internal rules. We (and also certain authorized services providers) may request rectifications in the ballot paper sent by shareholders wishing to cast votes remotely. In certain specific cases and under certain conditions, we might provide our shareholders with a more beneficial deadline or mechanism to send back the ballot papers, or to attend our shareholders' meetings (for example, by means of an electronic system which may allow them to remotely attend our meetings).

CVM Rule No. 481 also established the right of shareholders to request the inclusion of candidates and proposals in the ballot, to the extent that the terms provided for in CVM Rule No. 481 are observed. The inclusion of proposals in the ballot must be requested up to 45 days before the annual general meeting. In relation to the inclusion of candidates in the annual general meeting or in the extraordinary general meeting, in both cases the request must be made up to 25 days before the date of such meeting. If the inclusion of a candidate is requested properly, we must present a new version of the ballot at least 20 days before the date of the referred meeting in order for the shareholders to decide whether they want to change their votes or not. If the shareholders do not provide new voting instructions, the previous one will be considered. We may request rectifications to requests made by shareholders wishing to include proposals or candidates on the ballot. A request made by a shareholder may be revoked at any time up to the relevant general meeting, upon notice by the requesting shareholder to the Investor Relations Officer, in which case any votes may be disregarded.

Another obligation of CVM Rule No. 481 is the disclosure of the voting statement, containing the first five numbers of each shareholder CPF or CNPJ and their votes for each subject discussed in the general meeting, such disclosure must be made by the company within seven business days after the meeting.

Since 2008, our company has been adopting a Manual for Participation in General Shareholders' Meetings to provide, in a clear and summarized form, information relating to our company's Shareholders General Meeting and to encourage and facilitate the participation of all shareholders. This manual includes a standard power of attorney, which may be used by shareholders who are unable to be present at the meetings to appoint an attorney-in-fact to exercise their voting rights with regard to issues on the agenda.

Voting Rights of ADS Holders

According to CVM Rule n° 559/2015, whenever the contracts related to the ADSs program allow, the ADS holders may instruct the depositary to vote the number of common shares that their ADSs represent otherwise the depositary shall exercise the voting rights related to such shares in the best interest of the ADS holders. The depositary will notify those holders of shareholders' meetings and arrange to deliver our voting materials to them upon our request. Those materials will describe the matters to be voted on and explain how the ADS holders may instruct the depositary how to vote. For instructions to be valid, they must reach the depositary by a date set by the depositary.

We cannot assure ADS holders that they will receive the voting materials or otherwise learn of an upcoming shareholders' meeting in time to ensure that they can instruct the depositary to vote their common shares. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. *This means that ADS holders may not be able to exercise their right to vote and there may be nothing that they can do if their shares are not voted as they requested.*

Preemptive Rights

Our shareholders have a general preemptive right to subscribe for shares in any capital increase according to the proportion of their shareholdings. Pursuant to Brazilian Corporate Law, our shareholders also have a general preemptive right to subscribe for any convertible debentures and subscription warrants that we may issue. A period of at least 30 days following the publication of notice of the capital increase is allowed for the exercise of the preemptive right. Pursuant to Brazilian Corporate Law, holders are permitted to transfer or dispose of their preemptive right for consideration.

Pursuant to Brazilian Corporate Law and our bylaws, our Board of Directors may decide to increase our share capital within the limit of the authorized capital. Whenever such increase is made through a stock exchange, through a public offering or through an exchange of shares in a public which purpose is to acquire control of another company, the Board of Directors is entitled to exclude the preemptive rights or reduce the exercise period of such rights.

Withdrawal Rights

Brazilian Corporate Law grants our shareholders the right to withdraw from the company in case they disagree with decisions taken in shareholder's meetings concerning the following matters: (i) the reduction of minimum mandatory dividends; (ii) the merger of the company or consolidation with another company; (iii) the change of the corporate purpose of the company; (iv) a spinoff of the company (if such spinoff changes the company's corporate purpose, reduces mandatory dividends or results in the company joining a group of entities); (v) the acquisition by us of the control of another company for a price that exceeds the limits established in paragraph two of Article 256 of Brazilian Corporate Law; (vi) a change in our corporate form; (vii) approval of our participation in a group of companies (as defined in Brazilian Corporate Law); (viii) if the company resulting from a merger, spin-off or consolidation with another company, which is a successor of a public-held company, does not register itself with the CVM as a publicly-held company, within the deadlines provided under Brazilian Corporate Law; or (ix) stock swap merger of the company with another company, so that the company becomes a wholly-owned subsidiary of that company. Even shareholders who did not vote or were not present at the relevant meeting may exercise this withdrawal right, subject to certain conditions provided under Brazilian Corporate Law.

If our shareholders wish to withdraw from our company due to a merger or a participation in a group of companies, such right may only be exercised provided that our company's shares have neither liquidity nor dispersion in the market.

The withdrawal right entitles the shareholder to the reimbursement of the value of its shares, upon request within 30 days of the publication of notice of the shareholders meeting, except in certain specific cases provided for in Brazilian Corporate Law. After a term provided under Brazilian Corporate Law, our Management bodies may choose to call a general meeting to ratify or reconsider the decision which triggered the withdrawal rights, should the payment of such rights threaten the financial stability of the company.

Material Contracts

See "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects" for information concerning our material contracts.

Exchange Controls and Other Limitations Affecting Security Holders

There are no restrictions on ownership of our capital stock by individuals or legal entities domiciled outside Brazil. However, the right to convert dividend payments and proceeds from the sale of common shares into foreign currency and to remit such amounts outside Brazil is subject to restrictions under foreign investment legislation which generally requires, among other things, that the relevant investment be registered with the SISBACEN. These restrictions on the remittance of foreign capital abroad could hinder or prevent the custodian for the common shares represented by ADSs, or holders who have exchanged ADSs for common shares, from remitting proceeds related to dividends, or distributions or the proceeds from any sale of common shares abroad. Delays in, or refusal to grant any required government approval for conversions of Brazilian currency payments and remittances abroad of amounts owed to holders of ADSs could adversely affect holders of ADRs.

Resolution No. 4,373, issued by the National Monetary Council on September 29, 2014, or Resolution No. 4,373, provides that foreign investors may invest in financial and capital markets in Brazil, including through the issuance of depositary receipts in foreign markets in respect of shares of Brazilian issuers.

The custodian has obtained an electronic registration with SISBACEN in the name of Citibank N.A., the depository, with respect to the ADSs. Under this electronic registration, the custodian and the depository are able to remit outside Brazil the dividends and other distributions on our common shares represented by ADSs. Pursuant to CMN Resolution No. 4,373, in order for an ADS holder to surrender ADSs for the purpose of withdrawing the shares represented thereby and be entitled to trade the underlying shares directly on the B3, the investor is required to appoint a Brazilian financial institution duly authorized by the Central Bank and the CVM to act as its legal representative. Any holder who exchanges ADSs for common shares will need to update his or her registration with the SISBACEN and enter into simultaneous foreign exchange transactions (without the effective remittance of funds) in order to be able to remit dividends and other distributions outside Brazil. The holder may not be able to remit outside Brazil any distributions, or proceeds from dispositions of shares, until he or she has entered into these foreign exchange transactions and updated his or her SISBACEN registration. If the holder converts the ADSs into a direct investment, he or she may be subject to a less favorable Brazilian tax treatment than a holder of ADSs. See “—Brazilian Tax Considerations” for more information.

Under Brazilian law, whenever there is a serious imbalance in Brazil’s balance of payments or reasons to foresee a serious imbalance, the Brazilian government may impose temporary restrictions on the remittance to foreign investors of the proceeds of their investments in Brazil, and on the conversion of Brazilian currency into foreign currencies. Such restrictions may hinder or prevent the custodian or holders who have exchanged ADSs for underlying common shares from converting distributions or the proceeds from any sale of such shares, as the case may be, into U.S. dollars and remitting such U.S. dollars abroad.

Taxation

The following discussion summarizes the material Brazilian and U.S. federal income tax consequences of the acquisition, ownership and disposition of common shares or ADSs, but it does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase, own or dispose of common shares or ADSs. The summary is based upon the tax laws of Brazil and regulations thereunder and on the tax laws of the United States and regulations thereunder as in effect on the date hereof, which are subject to change (possibly on a retroactive basis) and different interpretations. **Holders of common shares or ADSs should consult their own tax advisors as to the tax consequences of the acquisition, ownership and disposition of common shares or ADSs.**

Although there is currently no income tax treaty between Brazil and the United States, the tax authorities of the two countries have had discussions that may culminate in such a treaty. No assurance can be given, however, as to whether or when a treaty will enter into force or how it will affect the U.S. holders (as defined below) of common shares or ADSs. Prospective holders of common shares or ADSs should consult their own tax advisors as to the tax consequences of the acquisition, ownership and disposition of common shares or ADSs in their particular circumstances.

Brazilian Tax Considerations

The following discussion summarizes the material Brazilian tax consequences of the acquisition, ownership and disposition of our common shares or ADSs by a holder that is not domiciled in Brazil for purposes of Brazilian taxation, or a Non-Brazilian Holder.

Pursuant to Brazilian law, foreign investors may invest in the financial and capital markets of Brazil, including shares issued by Brazilian publicly traded corporations, provided that the applicable requirements are met, especially those provided under Resolution No. 4,373.

According to Resolution No. 4,373, investments of foreign investors shall be made in Brazil pursuant to the same instruments and operational modalities available to the investors resident or domiciled in Brazil. The definition of foreign investor includes individuals, legal entities, funds and other collective investment entities, resident, domiciled or headquartered abroad.

Pursuant to Resolution 4,373, among the requirements applicable to the investment of foreign investors in the Brazilian financial and capital markets, the foreign investors must: (i) appoint at least one representative in Brazil, which must be a financial institution or other institution authorized by the Brazilian Central Bank to operate in Brazil. The local representative appointed by the foreign investor shall be responsible for performing and updating the registration of the investments made by the foreign investor to the Brazilian Central Bank, as well as the registration of the foreign investor with the CVM; (ii) obtain a registry as foreign investor with the CVM, through the representative appointed pursuant to item (i) above; and (iii) establish or contract one or more custodians authorized by the CVM to perform custody activities.

Securities and other financial assets held by foreign investors pursuant to Resolution No. 4,373 must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Brazilian Central Bank or the CVM, or be registered with clearing houses or other entities that provide services of registration, clearing and settlement duly licensed by the Brazilian Central Bank or the CVM. In the case of depositary receipts, the record must be made by the Brazilian custodian entity on behalf of the foreign depositary institution.

For purposes of the mandatory registry with the Brazilian Central Bank of foreign investments in the Brazilian financial and capital markets, Resolution No. 4,373 expressly provides that simultaneous foreign exchange transactions (*i.e.* without effective transfer of funds) shall be required in specific situations, including (i) conversion of credits held by foreign investors in Brazil into foreign investment in the Brazilian financial and capital markets; (ii) transfer of investments made in depositary receipts into foreign direct investments (or *investimento externo direto*) or investments in the Brazilian financial and capital markets; and (iii) transfer of investments in the Brazilian financial and capital markets into foreign direct investments.

In addition, Resolution No. 4,373 does not allow foreign investors to perform investments outside of organized markets, except as expressly authorized by the CVM through specific regulation. Pursuant to CVM Rule No. 560/15, the exceptions for investments outside of organized markets include subscription, stock bonus, among others.

Taxation of Dividends

Stock dividends paid by a Brazilian company to foreign investors, with respect both to foreign direct investments and to foreign investments carried out under the rules of Resolution No. 4,373, are generally not subject to withholding income tax in Brazil, to the extent that such amounts are related to profits generated as of January 1, 1996, as provided under article 10 of Law No. 9,249, dated December 26, 1995, or Law No. 9,249/95.

In this context, it should be noted that Law No. 11,638, dated December 28, 2007, or Law No. 11,638/07, significantly altered Brazilian corporate law in order to align the Brazilian generally accepted accounting standards more closely with the International Financial Reporting Standards, or IFRS. Nonetheless, Law No. 11,941, dated May 27, 2009, introduced the Transitory Tax Regime, or RTT, in order to render neutral, from a tax perspective, all the changes provided by Law No. 11,638/07. Under the RTT, for tax purposes, legal entities should observe the accounting methods and criteria as in force on December 31, 2007.

Profits determined pursuant to Law No. 11,638/07, or IFRS Profits, can differ from the profits calculated pursuant to the accounting methods and criteria as in force on December 31, 2007, or 2007 Profits.

While it was general market practice to distribute exempted dividends with reference to the IFRS Profits, Normative Ruling No. 1,397 issued by the Brazilian tax authorities on September 16, 2013, or “Normative Ruling No. 1,397/13” has established that legal entities should observe the accounting methods and criteria as in force on December 31, 2007 (*e.g.*, the 2007 Profits), upon determining the amount of profits that could be distributed as exempted income to its beneficiaries.

Any profits paid in excess of said 2007 Profits, or Excess Dividends, should, in the tax authorities’ view and in the specific case of non-resident beneficiaries, be subject to the following rules of taxation: (i) 15% withholding income tax, or WHT, in the case of beneficiaries domiciled abroad, but not in tax havens, and (ii) 25% WHT, in the case of beneficiaries domiciled in tax havens.

Since tax authorities could attempt to charge income tax due over Excess Dividends paid over the past five years based on the provisions of Normative Ruling No. 1,397/13, and in order to try to mitigate potential lawsuits of

taxpayers that could argue that Normative Ruling No. 1,397/13 is unlawful, the Brazilian government introduced new provisions dealing with the Excess Dividends. A new tax regime (the “New Tax Regime”) was introduced through the enactment of Law No. 12,973 of May 13, 2014, which brought significant modifications related to IRPJ, CSLL, PIS and COFINS, as well as revoking the RTT. Under the New Tax Regime, the current accounting standards (IFRS) became the starting point for the assessment of such taxes, except when Law No. 12,973/14 or supervening laws may treat such assessments in a different way, providing for specific adjustments to this purpose.

Moreover, the New Tax Regime applies to all taxpayers beginning January 1, 2015, except for those who chose to anticipate and apply the provisions contained in Articles 1, 2 and 4 through 70 of Law No. 12,973/14 for the 2014 base period, for whom the RTT was revoked beginning December 31, 2013; however, the current treatment for transactions carried out before the New Tax Regime's effectiveness (under its Article 64) were protected. We did not voluntarily elect to apply the New Tax Regime in 2014.

With respect to the taxation of dividends, the aforementioned new provisions determined that (i) the Excess Dividends related to profits assessed from 2008 to 2013 are assured to be exempt; (ii) potential disputes remain concerning the Excess Dividends related to 2014 profits, unless the company voluntarily elects to apply the New Tax Regime in 2014; and (iii) as of 2015, once the New Tax Regime is mandatory and has extinguished the RTT, it is possible to argue that dividends should be considered fully exempt as ordinarily provided by law.

Taxation of Gains

Pursuant to Law No. 10,833, enacted on December 29, 2003, gains on the disposition or sale of assets located in Brazil by a Non-Brazilian Holder, whether to another non-Brazilian resident or to a Brazilian resident, are subject to withholding income tax in Brazil.

With respect to the disposition of our common shares, as they are assets located in Brazil, the Non-Brazilian Holder should be subject to income tax on the gains assessed, following the rules described below.

With respect to our ADSs, arguably the gains realized by a Non-Brazilian Holder upon the disposition of ADSs to another non-Brazilian resident should not be taxed in Brazil, on the basis that ADSs are not "assets located in Brazil" for the purposes of Law No. 10,833/03. We cannot assure you, however, that the Brazilian tax authorities or the Brazilian courts will agree with this interpretation. As a result, gains on a disposition of ADSs by a Non-Brazilian Holder to a Brazilian resident, or even to a non-Brazilian resident, in the event that courts determine that ADSs would constitute assets located in Brazil, may be subject to income tax in Brazil according to the rules applicable to our common shares.

As a general rule, gains realized as a result of a disposition of our common shares or ADSs are the positive difference between the amount realized on the transaction and the acquisition cost of our common shares or ADSs.

Under Brazilian law, however, income tax rules on such gains may vary depending on the domicile of the Non-Brazilian Holder, the type of registration of the investment by the Non-Brazilian Holder with the Brazilian Central Bank and how the disposition is carried out, as described below.

Gains realized on a disposition of shares carried out on a Brazilian stock exchange (which includes the organized over-the-counter market) are:

- exempt from income tax when realized by a Non-Brazilian Holder that (1) has registered the investment in Brazil with the Brazilian Central Bank under the rules of Resolution No. 4,373, or a 4,373 Holder, and (2) is not resident or domiciled in a country or location which is defined as a "Low or Nil Tax Jurisdiction" for these purposes as described below;
- subject to income tax at a 15% rate, in the case of gains realized by (A) a Non-Brazilian Holder that (1) is not a 4,373 Holder and (2) is not resident or domiciled in a Low or Nil Tax Jurisdiction; or by (B) a Non-Brazilian Holder that (1) is a 4,373 Holder, and (2) is resident in a Low or Nil Tax Jurisdiction; or
- subject to income tax at a rate of up to 25%, in the case of gains realized by a Non-Brazilian Holder that (1) is not a 4,373 holder, and (2) is resident or domiciled in a Low or Nil Tax Jurisdiction.

In any case, a withholding income tax rate of 0.005% shall be applicable and withheld by the intermediary institution (*i.e.*, a broker) that receives the order directly from the Non-Brazilian Holder, which can be later offset against any income tax due on the capital gain earned by the Non-Brazilian Holder.

Subject to the discussion in the next paragraph, any other gains assessed on the disposition of common shares that are not carried out on a Brazilian stock exchange are:

- subject to income tax at a rate of 15% when realized by any Non-Brazilian Holder that is not resident or domiciled in a Low or Nil Tax Jurisdiction, and is a 4,373 Holder;
- subject to income tax at progressive rates, from a rate of 15% to 22.5%, in the case of gains realized by a Non-Brazilian Holder that (1) is not a 4,373 Holder and (2) is not resident or domiciled in a Low or Nil Taxation Jurisdiction; and
- subject to income tax at a rate of up to 25% when realized by a resident in a Low or Nil Tax Jurisdiction, whether a 4,373 Holder or not.

On September 22, 2015, the Brazilian government enacted Provisional Measure No. 692/2015, later converted into Law No. 13,259/2016, which introduced a regime based on the application of progressive tax rates for income taxation of capital gains recognized by Brazilian individuals on the disposition of assets in general and, as per Normative Instruction 1,732 of August 25, 2017, also by non-resident entities and individuals on the disposition of permanent assets (generally non-current assets from an accounting perspective) not carried out on a Brazilian stock exchange. Under Law No. 13,259/2016, effective as of January 1, 2017 (as confirmed by Declaratory Act No. 3, of April 27, 2016), capital gains recognized by Brazilian individuals on the disposition of assets in general and by non-resident entities and individuals on the disposition of permanent assets outside of a Brazilian stock exchange would be subject to the following rates of income tax: (1) 15% for the part of the gain that does not exceed R\$5 million, (2) 17.5% for the part of the gain that exceeds R\$5 million but does not exceed R\$10 million, (3) 20% for the part of the gain that exceeds R\$10 million but does not exceed R\$30 million, and (4) 22.5% for the part of the gain that exceeds R\$30 million. There are, however, good arguments to sustain that the progressive tax rates provided for in Law No. 13,259/2016 should not apply to gains recognized by a Non-Brazilian Holder that is not resident in a Low or Nil Tax Jurisdiction, and is a 4,373 Holder. If these gains are related to transactions conducted on the Brazilian non-organized over-the-counter market with intermediation, the withholding income tax of 0.005% on the sale value shall also be applicable and can be offset against the eventual income tax due on the capital gain.

In the case of redemption of securities or capital reduction by a Brazilian corporation, such as us, the positive difference between the amount effectively received by the Non-Brazilian Holder and the corresponding acquisition cost is treated, for tax purposes, as capital gain derived from sale or exchange of shares not carried out on a Brazilian stock exchange, and is therefore subject to income tax at rates varying from 15% to 22.5% or 25%, in case of Non-Brazilian Holders in Low or Nil Tax Jurisdictions, as the case may be. There are, however, good arguments to sustain that these progressive tax rates should not apply to gains recognized by a Non-Brazilian Holder that is not resident in a Low or Nil Tax Jurisdiction, and is a 4,373 Holder.

The deposit of our common shares in exchange for ADSs will be subject to Brazilian income tax if the acquisition cost of the shares is lower than (1) the average price per share on a Brazilian stock exchange on which the greatest number of such shares were sold on the day of deposit, or (2) if no shares were sold on that day, the average price on the Brazilian stock exchange on which the greatest number of shares were sold in the 15 trading sessions immediately preceding such deposit. In this case, the difference between the acquisition cost and the average price of the shares calculated as above will be considered to be a capital gain subject to withholding income tax at the rates varying from 15% to 22.5% or 25%, as the case may be. In some circumstances, there may be arguments to claim that this taxation is not applicable, including the case of a Non-Brazilian Holder that is a 4,373 Holder and is not resident in a Low or Nil Tax Jurisdiction for this purpose. The availability of these arguments to any specific holder of our common shares

will depend on the circumstances of the holder. Prospective holders of our common shares should consult their own tax advisors as to the tax consequences of the deposit of our common shares in exchange for ADSs.

Any exercise of preemptive rights relating to our common shares or ADSs will not be subject to Brazilian taxation. Any gain on the sale or assignment of preemptive rights relating to our common shares, including the sale or assignment carried out by the depositary, on behalf of Non-Brazilian Holders of ADSs, will be subject to Brazilian income taxation according to the same rules applicable to the sale or disposition of our common shares.

There can be no assurance that the current favorable tax treatment of 4,373 Holders will continue in the future.

Interpretation of the Discussion on the Definition of “Low or Nil Tax Jurisdiction”

On June 4, 2010, Brazilian tax authorities enacted Normative Instruction No. 1,037 listing (i) the countries and jurisdictions considered as Low or Nil Tax Jurisdictions or where local legislation does not allow access to information related to the shareholding composition of legal entities, to their ownership or to the identity of the effective beneficiary of the income attributed to non-residents, and (ii) the privileged tax regimes, whose definition is provided by Law No. 11,727, of June 23, 2008. Although we believe that the best interpretation of the current tax legislation could lead to the conclusion that the above mentioned “privileged tax regime” concept should apply solely for purposes of Brazilian transfer pricing, thin capitalization and controlled foreign company rules, we cannot assure you whether subsequent legislation or interpretations by the Brazilian tax authorities regarding the definition of a “privileged tax regime” provided by Law No. 11,727/08 will also apply to a Non-Brazilian Holder on payments potentially made by a Brazilian source.

Moreover, on November 28, 2014, due to the enactment of Ordinance No. 488, the definition of a Low or Nil Tax Jurisdiction, for the purposes described above, was changed from jurisdictions where there is no income tax, or the income tax rate applicable is inferior to 20%, to jurisdictions where there is no income tax, or the income tax applicable rate is inferior to 17%. Due to this change, the listing of Normative Instruction No. 1,037 may soon be updated.

We recommend prospective investors consult their own tax advisors from time to time to verify any possible tax consequences arising of Normative Ruling No. 1,037/10 and Law No. 11,727/08. If the Brazilian tax authorities determine that the concept of “privileged tax regime” provided by Law No. 11,727/08 will also apply to a Non-Brazilian Holder on payments potentially made by a Brazilian source, the withholding income tax applicable to such payments could be assessed at a rate up to 25%.

Tax on Foreign Exchange Transactions

Pursuant to Decree No. 6,306/07, the conversion into foreign currency or the conversion into Brazilian currency of the proceeds received or remitted by a Brazilian entity from a foreign investment in the Brazilian securities market, including those in connection with the investment by a Non-Brazilian Holder in the shares and ADSs, may be subject to the Tax on Foreign Exchange Transactions, or IOF/Exchange. Currently, the applicable rate for most foreign currency exchange transactions is 0.38%. However, currency exchange transactions carried out for the inflow of funds in Brazil by a 4,373 Holder are subject to IOF/Exchange at (i) a 0% rate in case of variable income transactions carried out on the Brazilian stock, futures and commodities exchanges, as well as in the acquisitions of shares of Brazilian publicly-held companies in public offerings or subscription of shares related to capital contributions, provided that the issuer company has registered its shares for trading in the stock exchange and (ii) a 0% rate for the outflow of resources from Brazil related to these type of investments, including payments of dividends and interest attributable to shareholders’ equity and the repatriation of funds invested in the Brazilian market. Furthermore, the IOF/Exchange is currently levied at a 0% rate on the withdrawal of ADSs into shares. In any case, the Brazilian government is permitted to increase at any time the rate to a maximum of 25%, but only in relation to future transactions.

Brazilian law imposes a tax on transactions involving bonds and securities, or the IOF/Bonds Tax, including those carried out on Brazilian stock, futures or commodities exchanges. The IOF/Bonds Tax is currently reduced to zero in almost all transactions, including those carried out on a Brazilian stock exchange. The rate of the IOF/Bonds Tax applicable to transactions involving our common shares is currently zero, including, as of December 24, 2013, the rate of the IOF/Bonds Tax applicable to the transfer of our common shares with the specific purpose of enabling the issuance of ADSs. The Brazilian government may increase the rate of the IOF/Bonds Tax at any time up to 1.5% per day of the transaction amount, but only in respect of transactions carried out after the increase in rate enters into effect.

Other Relevant Brazilian Taxes

There are no Brazilian inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of common shares or ADSs by a Non-Brazilian Holder, except for gift and inheritance taxes levied by certain Brazilian states on gifts or inheritance bestowed by individuals or entities not resident or domiciled in Brazil or not domiciled within that state, to individuals or entities resident or domiciled within that Brazilian state. There are no Brazilian stamp, issue, registration or similar taxes or duties payable by holders of common shares or ADSs.

U.S. Federal Income Tax Consequences

This discussion is a summary of certain U.S. federal income tax consequences of the acquisition, ownership and disposition of common shares or ADSs. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended, or the Code, its legislative history, existing final, temporary and proposed Treasury regulations, administrative pronouncements by the U.S. Internal Revenue Service, or the IRS, and judicial decisions, in each case as of the date hereof, all of which are subject to change (possibly on a retroactive basis) and to different interpretations.

This discussion does not purport to be a comprehensive description of all of the U.S. federal income tax consequences that may be relevant to a particular holder (including tax considerations that arise from rules of general application to all taxpayers or to certain classes of investors or that are generally assumed to be known by investors) and holders are urged to consult their own tax advisors regarding their specific tax situations. This discussion applies only to holders of common shares or ADSs who hold the common shares or ADSs as “capital assets” (generally, property held for investment) under the Code and does not address the tax consequences that may be relevant to holders in special tax situations, including, for example:

- brokers or dealers in securities or currencies;
- U.S. holders whose functional currency is not the U.S. dollar;
- holders that own or have owned stock constituting 10.0% or more of our total combined voting power or value (whether such stock is directly, indirectly or constructively owned);
- tax-exempt organizations;
- regulated investment companies;
- real estate investment trusts;
- grantor trusts;
- common trust funds;
- banks or other financial institutions;
- persons liable for the alternative minimum tax;
- securities traders who elect to use the mark-to-market method of accounting for their securities holdings;
- insurance companies;

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- persons that acquired common shares or ADSs as compensation for the performance of services;
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- U.S. expatriates; and
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- persons holding common shares or ADSs as part of a straddle, hedge or conversion transaction or as part of a synthetic security, constructive sale or other integrated transaction.

Except where specifically described below, this discussion assumes that we are not a PFIC for U.S. federal income tax purposes. In addition, this discussion does not address tax considerations applicable to persons that hold an interest in a partnership (or other entity or arrangement classified as a partnership for U.S. federal income tax purposes) that holds common shares or ADSs, or any U.S. federal estate and gift, state, local or non-U.S. tax consequences of the acquisition, ownership and disposition of common shares or ADSs. This discussion does not address the Medicare tax on net investment income. Each holder should consult such holder's own tax advisor concerning the overall tax consequences to it, including the consequences under laws other than U.S. federal income tax laws, of an investment in common shares or ADSs.

As used herein, the term "U.S. holder" means a beneficial owner of common shares or ADSs that is, for U.S. federal income tax purposes, (i) an individual who is a citizen or resident of the United States; (ii) a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia; (iii) an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or (iv) a trust if (A) it is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all of the substantial decisions of the trust or (B) it has a valid election in effect under applicable Treasury regulations to be treated as a U.S. person. As used herein, the term "non-U.S. holder" means a beneficial owner of common shares or ADSs that is neither a U.S. holder nor a partnership (or an entity or arrangement treated as a partnership for U.S. federal income tax purposes).

If a partnership (or other entity or arrangement classified as a partnership for U.S. federal income tax purposes) owns common shares or ADSs, the tax treatment of a partner in such partnership will generally depend on the status of the partner and the activities of the partnership holding common shares or ADSs. Partnerships that are beneficial owners of common shares or ADSs, and partners in such partnerships, should consult their own tax advisors regarding the U.S. federal, state, local and non-U.S. tax considerations applicable to them with respect to the acquisition, ownership and disposition of common shares or ADSs.

For U.S. federal income tax purposes, a holder of an ADS will generally be treated as the beneficial owner of the common shares represented by the ADS. However, see the discussion below under "—Taxation of Distributions" regarding certain statements made by the U.S. Treasury Department concerning depository arrangements.

Taxation of Distributions

The gross amount of any distributions of cash or property made with respect to common shares or ADSs (including distributions characterized as interest attributable to shareholders' equity for Brazilian law purposes and any amounts withheld to reflect Brazilian withholding taxes) generally will be taxable as dividends for U.S. federal income tax purposes to the extent of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles.

A U.S. holder will generally include such dividends in gross income as ordinary income on the day such dividends are actually or constructively received (which, in the case of the ADSs, will be the date such dividends are actually or constructively received by the depository). Distributions in excess of our current and accumulated earnings and profits will be treated first as a non-taxable return of capital, thereby reducing the U.S. holder's adjusted tax basis (but not below zero) in common shares or ADSs, as applicable, and thereafter as either long-term or short-term capital gain (depending on whether the U.S. holder has held common shares or ADSs, as applicable, for more than one year as of the time such distribution is actually or constructively received) we do not, however, expect to determine earnings and profits in accordance with U.S. federal income tax principles. Therefore, a U.S. holder should expect that a distribution will generally be treated as a dividend.

If any cash dividends are paid in *reais*, the amount of the dividend paid in *reais* will be the U.S. dollar value of the *reais* received, calculated by reference to the exchange rate in effect on the date of actual or constructive receipt (which, in the case of the ADSs, will be the date such dividends are actually or constructively received by the depository), regardless of whether the payment in *reais* is in fact converted into U.S. dollars at that time. If the *reais* received as a dividend are converted into U.S. dollars on the date of actual or constructive receipt, a U.S. holder should not recognize foreign currency gain or loss in respect of such dividend. If the *reais* received as a dividend are not converted into U.S. dollars on the date of actual or constructive receipt, a U.S. holder will have a tax basis in the *reais* equal to their U.S. dollar value on the date of receipt. If any *reais* actually or constructively received by a U.S. holder are later converted into U.S. dollars, such U.S. holder may recognize foreign currency gain or loss, which would be treated as ordinary gain or loss. Such gain or loss generally will be treated as gain or loss from sources within the United States for U.S. foreign tax credit purposes. U.S. holders should consult their own tax advisors concerning the possibility of foreign currency gain or loss if any such *reais* are not converted into U.S. dollars on the date of actual or constructive receipt.

Dividends paid by us will not be eligible for the dividends received deduction allowed to corporations under the Code. Subject to the below-mentioned concerns by the U.S. Treasury Department regarding certain inconsistent actions taken by intermediaries and certain exceptions for short-term and hedged positions, the U.S. dollar amount of dividends received by certain non-corporate U.S. holders (including individuals) with respect to the ADSs will be subject to taxation at a maximum rate of 20.0% if the dividends represent “qualified dividend income.” Dividends paid on the ADSs will be treated as qualified dividend income if (i) the ADSs are readily tradable on an established securities market in the United States and (ii) we were not, in the year prior to the year in which the dividend was paid, and are not, in the year in which the dividend is paid, a PFIC. The ADSs are listed on the New York Stock Exchange, and will qualify as readily tradable on an established securities market in the United States so long as they are so listed. However, no assurances can be given that the ADSs will be or will remain readily tradable. See below for a discussion regarding our PFIC determination.

Based on existing guidance, it is not entirely clear whether dividends received with respect to the common shares will be treated as qualified dividend income, because the common shares are not themselves listed on a U.S. exchange. In addition, the U.S. Treasury Department has announced its intention to promulgate rules pursuant to which holders of common shares or ADSs and intermediaries through whom such securities are held will be permitted to rely on certifications from issuers to establish that dividends are treated as qualified dividends. Because such procedures have not yet been issued, it is not clear whether we will be able to comply with them. **U.S. holders of common shares or ADSs should consult their own tax advisors regarding the availability of the reduced dividend tax rate in the light of their own particular circumstances.**

Subject to certain limitations (including a minimum holding period requirement), a U.S. holder may be entitled to claim a U.S. foreign tax credit in respect of any Brazilian income taxes withheld on dividends received with respect to the common shares or ADSs. A U.S. holder that does not elect to claim a credit for any foreign income taxes paid or accrued during a taxable year may instead claim a deduction in respect of such Brazilian income taxes, provided that the U.S. holder elects to deduct (rather than credit) all foreign income taxes paid or accrued for the taxable year. Dividends received with respect to the common shares or ADSs generally will be treated as dividend income from sources outside of the United States and generally will constitute “passive category income” for U.S. foreign tax credit limitation purposes for most U.S. holders. The rules governing foreign tax credits are complex and U.S. holders should consult their own tax advisors regarding the availability of foreign tax credits in their particular circumstances. The U.S. Treasury Department has expressed concern that intermediaries in connection with depositary arrangements may be taking actions that are inconsistent with the claiming of foreign tax credits by U.S. persons who are holding depositary shares. Accordingly, U.S. holders should be aware that the discussion above regarding the ability to credit Brazilian withholding tax on dividends and the availability of the reduced tax rate for dividends received by certain non-corporate holders above could be affected by actions taken by parties to whom the ADSs are released and the IRS.

Distributions of additional shares to holders with respect to their common shares or ADSs that are made as part of a pro rata distribution to all our shareholders generally will not be subject to U.S. federal income tax.

Non-U.S. holders generally will not be subject to U.S. federal income tax or withholding tax on distributions with respect to common shares or ADSs that are treated as dividend income for U.S. federal income tax purposes unless such dividends are effectively connected with the conduct by such holders of a trade or business in the United States (and, if required by an applicable income tax treaty, are attributable to a U.S. permanent establishment or fixed base).

Taxation of Sales, Exchanges or Other Taxable Dispositions

Deposits and withdrawals of common shares by U.S. holders in exchange for ADSs will not result in the realization of gain or loss for U.S. federal income tax purposes.

Upon the sale, exchange or other taxable disposition of common shares or ADSs, a U.S. holder will generally recognize gain or loss for U.S. federal income tax purposes in an amount equal to the difference between the amount realized in consideration for the disposition of the common shares or ADSs and the U.S. holder's adjusted tax basis in the common shares or ADSs, both determined in U.S. dollars. Such gain or loss generally will be treated as capital gain or loss and will be long-term capital gain or loss if the common shares or ADSs have been held for more than one year at the time of the sale, exchange or other taxable disposition. Under current law, certain non-corporate U.S. holders (including individuals) may be eligible for preferential rates of U.S. federal income tax in respect of long-term capital gains. The deductibility of capital losses is subject to limitations under the Code.

If Brazilian income tax is withheld on the sale, exchange or other taxable disposition of common shares or ADSs, the amount realized by a U.S. holder will include the gross amount of the proceeds of that sale, exchange or other taxable disposition before deduction of the Brazilian income tax withheld. Capital gain or loss, if any, realized by a U.S. holder on the sale, exchange or other taxable disposition of common shares or ADSs generally will be treated as U.S. source gain or loss for U.S. foreign tax credit purposes. Consequently, in the case of a gain from the disposition of common shares or ADSs that is subject to Brazilian income tax (see “—Brazilian Tax Considerations—Taxation of Gains”), the U.S. holder may not be able to benefit from the foreign tax credit for that Brazilian income tax (*i.e.*, because the gain from the disposition would be U.S. source), unless the U.S. holder can apply the credit against U.S. federal income tax payable on other income from foreign sources. Alternatively, the U.S. holder may take a deduction for the Brazilian income tax, provided that the U.S. holder elects to deduct all foreign income taxes paid or accrued for the taxable year.

A non-U.S. holder will not be subject to U.S. federal income tax or withholding tax on gain realized on the sale or other taxable disposition of common shares or ADSs unless (i) such non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of the sale or other taxable disposition and certain other conditions are met or (ii) such gain is effectively connected with the conduct by the non-U.S. holder of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment or fixed base). If the first exception (i) applies, the non-U.S. holder generally will be subject to tax at a rate of 30% (or such lower rate provided by an applicable treaty) on the amount by which the gains derived from the sales that are from U.S. sources exceed capital losses allocable to U.S. sources. If the second exception (ii) applies, the non-U.S. holder generally will be subject to U.S. federal income tax with respect to the gain in the same manner as U.S. holders, as described above. In addition, in the case of (ii), if such non-U.S. holder is a foreign corporation, it may be subject to a branch profits tax equal to 30% (or such lower rate provided by an applicable treaty) of its effectively connected earnings and profits for the taxable year, subject to certain adjustments.

Passive Foreign Investment Company Rules

Special U.S. federal income tax rules apply to U.S. persons owning shares of a PFIC. In general, a non-U.S. corporation will be classified as a PFIC for any taxable year during which, after applying relevant look through rules with respect to the income and assets of subsidiaries, either (i) 75.0% or more of the non-U.S. corporation's gross income is “passive income” or (ii) 50.0% or more of the gross value (determined based on a quarterly average) of the non-U.S. corporation's assets produce passive income or are held for the production of passive income. For these purposes, passive income generally includes, among other things, dividends, interest, rents, royalties, gains from the disposition of passive assets and gains from commodities and securities transactions, other than certain active business

gains from the sale of commodities (subject to various exceptions). In determining whether a non-U.S. corporation is a PFIC, a *pro rata* portion of the income and assets of each corporation in which it owns, directly or indirectly, at least 25.0% interest (by value) is taken into account.

The determination as to whether a non-U.S. corporation is a PFIC is based on the composition of the income and assets of the non-U.S. corporation from time to time and the application of complex U.S. federal income tax rules, which are subject to different interpretations and involves uncertainty. Based on our audited annual consolidated financial statements, the nature of our business, and relevant market and shareholder data, we believe that we would not be classified as a PFIC for our last taxable year or our current taxable year (although the determination cannot be made until the end of such taxable year), and we do not expect to be classified as a PFIC in the foreseeable future, based on our current business plans and our current interpretation of the Code and Treasury regulations that are currently in effect. However, because the application of the Code and Treasury regulations are not entirely clear and because PFIC status depends on the composition of a non-U.S. corporation's income and assets and the market value of its assets from time to time, there can be no assurance that we will not be treated as a PFIC for any taxable year.

If, contrary to the discussion above, we are treated as a PFIC with respect to any year in which a U.S. holder holds common shares or ADSs, such a U.S. holder would be subject to special rules (and may be subject to increased U.S. federal income tax liability and filing requirements) with respect to (a) any gain realized on the sale, exchange or other taxable disposition of common shares or ADSs and (b) any “excess distribution” made by us to the U.S. holder (generally, any distribution during a taxable year in which distributions to the U.S. holder on the common shares or ADSs exceed 125% of the average annual distributions the U.S. holder received on the common shares or ADSs during the preceding three taxable years or, if shorter, the U.S. holder’s holding period for the common shares or ADSs). Under those rules, (a) the gain or excess distribution would be allocated ratably over the U.S. holder’s holding period for the common shares or ADSs, (b) the amount allocated to the taxable year in which the gain or excess distribution is realized and to taxable years before the first day on which we became a PFIC would be taxable as ordinary income, (c) the amount allocated to each prior year in which we were a PFIC would be subject to U.S. federal income tax at the highest tax rate in effect for that year and (d) the interest charge generally applicable to underpayments of U.S. federal income tax would be imposed in respect of the tax attributable to each prior year in which we were a PFIC.

If we are treated as a PFIC and, at any time, we invest in non-U.S. corporations that are classified as PFICs (each, a “lower-tier PFIC”), U.S. holders generally will be deemed to own, and also would be subject to the PFIC rules with respect to, their indirect ownership interest in that lower-tier PFIC. If we are treated as a PFIC, a U.S. holder could incur liability for the deferred tax and interest charge described above if either (i) we receive a distribution from, or dispose of all or part of our interest in, the lower-tier PFIC or (ii) the U.S. holder disposes of all or part of its common shares or ADSs.

In general, if we are treated as a PFIC, the rules described above can be avoided by a U.S. holder that elects to be subject to a mark-to-market regime for stock in a PFIC. A U.S. holder may elect mark-to-market treatment for its common shares or ADSs, provided the common shares or ADSs, for purposes of the rules, constitute “marketable stock” as defined in Treasury regulations. The ADSs will be “marketable stock” for this purpose if they are traded on the New York Stock Exchange, other than in *de minimis* quantities, on at least 15 days during each calendar quarter. The common shares, which are listed on the B3, will be “marketable stock” if the B3 meets certain requirements and if the common shares are traded on the B3, other than in *de minimis* quantities, on at least 15 days during each calendar quarter. A U.S. holder electing the mark-to-market regime generally would compute gain or loss at the end of each taxable year that we are a PFIC as if the common shares or ADSs had been sold at fair market value. Any gain recognized by the U.S. holder under mark-to-market treatment, or on an actual sale in a year that we are a PFIC, would be treated as ordinary income, and the U.S. holder would be allowed an ordinary deduction for any decrease in the value of common shares or ADSs as of the end of any taxable year that we are a PFIC, and for any loss recognized on an actual sale in a year that we are a PFIC, but only to the extent, in each case, of previously included mark-to-market income not offset by previously deducted decreases in value. Any loss on an actual sale of common shares or ADSs would be a capital loss to the extent in excess of previously included mark-to-market income not offset by previously deducted decreases in value. A U.S. holder’s adjusted tax basis in common shares or ADSs would increase or decrease by gain or loss taken into account under the mark-to-market regime. A mark-to-market election is generally irrevocable unless the IRS consents to the revocation of the election. In addition, a mark-to-market election with respect to common shares or ADSs would not apply to any lower-tier PFIC, and a U.S. holder would not be able to make such a mark-to-market election in respect of its indirect ownership interest in that lower-tier PFIC. Consequently, the PFIC rules could apply with respect to income of a lower-tier PFIC, the value of which would already have been taken into account indirectly via mark-to-market adjustments in respect of common shares or ADSs.

A U.S. holder that owns common shares or ADSs during any taxable year that we are treated as a PFIC generally would be required to file IRS Form 8621, including in order to comply with an additional annual filing requirement

for U.S. persons owning shares of a PFIC. U.S. holders should consult their independent tax advisors regarding the application of the PFIC rules to common shares or ADSs, the availability and advisability of making an election to avoid the adverse tax consequences of the PFIC rules should we be considered a PFIC for any taxable year and the reporting requirements that may apply to their particular situation.

Backup Withholding and Information Reporting

Dividends paid on, and proceeds from the sale, exchange or other taxable disposition of, common shares or ADSs to a U.S. holder generally may be subject to the information reporting requirements of the Code and may be subject to backup withholding of U.S. federal income tax (currently at a rate of 24.0%) unless the U.S. holder (i) provides an accurate taxpayer identification number and certifies that it is a U.S. person and that no loss of exemption from backup withholding has occurred or (ii) establishes that it is an exempt recipient. The amount of any backup withholding collected from a payment to a U.S. holder will be allowed as a credit against the U.S. holder's U.S. federal income tax liability and may entitle the U.S. holder to a refund, provided that certain required information is timely furnished to the IRS.

In addition, U.S. holders should be aware that additional reporting requirements apply with respect to the holding of certain foreign financial assets, including stock of foreign issuers which is not held in an account maintained by certain financial institutions, if the aggregate value of all such assets exceeds U.S.\$50,000 on the last day of the tax year or U.S.\$75,000 at any time during the tax year. U.S. holders should consult their own tax advisors regarding the application of the information reporting rules to common shares or ADSs and the application of the foreign financial asset rules to their particular situations.

Non-U.S. holders generally will not be subject to information reporting and backup withholding tax, but may be required to comply with certain certification and identification procedures in order to establish their eligibility for such exemption.

Documents on Display

Statements contained in this annual report regarding the contents of any contract or other document are not necessarily complete, and, where the contract or other document is an exhibit to the annual report, each of these statements is qualified in all respects by the provisions of the actual contract or other documents.

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, applicable to a foreign private issuer, and accordingly, we file or furnish reports, information statements and other information with the SEC. Reports and other information filed by us with the SEC can be inspected at, and subject to the payment of any required fees, copies may be obtained from, the public reference facilities of the SEC, 100 F Street, N.E., Washington, D.C. 20549. Our filings will also be available at the SEC's website at <http://www.sec.gov>.

Reports and other information may also be inspected and copied at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005. As a foreign private issuer, however, we are exempt from the proxy requirements of Section 14 of the Exchange Act and from the short-swing profit recovery rules of Section 16 of the Exchange Act.

Our website is located at <http://www.cpfl.com.br> and our investor relations website is located at <http://www.cpfl.com.br/ir>. (These URLs are intended to be an inactive textual reference only. They are not intended to be an active hyperlink to our website. The information on our website, which might be accessible through a hyperlink resulting from this URL is not, and shall not be deemed to be, incorporated into this annual report.)

ITEM 11. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk from changes in both foreign currency exchange rates and rates of interest and indexation. We have foreign exchange rate risk with respect to our debt denominated in U.S. dollars. We are subject to market risk deriving from changes in rates which affect the cost of our financing.

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Exchange Rate Risk

At December 31, 2018, 27.6% of our indebtedness was denominated in foreign currency. Also at December 31, 2018, we had swap agreements to CDI that offset the exchange rate risk exposure in foreign currency loans. As our net exposure is an asset denominated in U.S. dollars since the swap has higher balances than the liability, our exchange rate risk is associated with the risk of a drop in the value of the U.S. dollar. The potential loss to us that would result from a hypothetical favorable 50.0% change in foreign currency exchange rates (an expected scenario provided by the B3), after giving effect to the swaps, would be R\$33.7 million (R\$15.8 million if considering an hypothetical favorable 25.0% change in foreign currency exchange rates), primarily due to the increase, in Brazilian *reais*, in the principal amount of our foreign currency indebtedness. The total increase in our foreign currency indebtedness would be reflected as an expense in our income statement. See Note 33.d.1 to our audited annual consolidated financial statements for more information on other scenarios.

Risk of Index Variation

We have indebtedness and financial assets that are denominated in *reais* and that bear interest at variable rates or, in some cases, are fixed. The interest or indexation rates include several different Brazilian money-market rates and inflation rates. At December 31, 2018, the amount of such liabilities, net of such assets and after giving effect to swaps, was R\$7,558 million. See Note 33.d.2 to our audited annual consolidated financial statements for more information on other scenarios.

A hypothetical, instantaneous and unfavorable change of 25% in rates applicable to floating rate financial assets and liabilities held at December 31, 2018, would result in a net additional cash outflow of R\$1,065 million. This sensitivity analysis is based on the assumption of an unfavorable 25% movement of the interest rates applicable to each homogeneous category of financial assets and liabilities (an expected scenario available in the Market). A homogeneous category is defined according to the currency in which financial assets and liabilities are denominated and assumes the same interest rate movement within each homogeneous category (*e.g.*, U.S. dollars). As a result, our interest rate risk sensitivity model may overstate the impact of interest rate fluctuations for such financial instruments as unfavorable movements of all interest rates are unlikely.

ITEM 12. Description of Securities Other than Equity Securities

American Depositary Shares

Fees and Expenses

The former depositary, Deutsche Bank Trust Company Americas, provided the services of depositary bank to holders of ADSs until January 7, 2015. Citibank N.A., which has its principal executive office at New York, is the current depositary, as of January 8, 2015. The following table summarizes the fees and expenses payable by holders of ADSs (charged by the depositary):

<i>Service:</i>	<i>Fee:</i>	<i>Paid by:</i>
Issuance of ADSs upon deposit of shares, excluding issuances resulting from distributions described in the fourth item below	Up to US\$5.00 per 100 ADSs (or fraction thereof) issued	Person depositing our common shares or person receiving ADSs

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Delivery of common shares deposited under our deposit agreement against surrender of ADSs	Up to US\$5.00 per 100 ADSs (or fraction thereof) surrendered	Person surrendering ADSs for cancellation and withdrawal of deposited securities or person to whom deposited securities are delivered
Distribution of cash dividends or other cash distributions	Up to US\$5.00 per 100 ADSs (or fraction thereof) held	Person to whom distribution is made
Distribution of ADSs pursuant to (i) stock dividends or other free stock distributions, or (ii) exercise of rights to purchase additional ADSs	Up to US\$5.00 per 100 ADSs (or fraction thereof) held	Person to whom distribution is made
Distribution of securities other than ADSs or rights to purchase additional ADSs	Up to US\$5.00 per 100 ADSs (or fraction thereof) held	Person to whom distribution is made
Depository services	Up to US\$5.00 per 100 ADSs (or fraction thereof) held	Person holding ADSs on the applicable record date(s) established by the depository

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The depositary may deduct applicable depositary fees from the funds being distributed in the case of cash distributions. For distributions other than cash, the depositary will invoice the amount of the applicable depositary fees to the applicable holders.

Additional Charges

Holders and beneficial owners of our ADSs and persons depositing our common shares and persons surrendering ADSs for cancellation and for the purpose of withdrawing deposited securities shall be responsible for the following charges:

- (a) taxes (including applicable interest and penalties) and other governmental charges;
- (b) such registration fees as may from time to time be in effect for the registration of our common shares or other deposited securities on the share register and applicable to transfers of our common shares or other deposited securities to or from the name of the custodian, the depositary or any nominees upon the making of deposits and withdrawals, respectively;
- (c) such cable, telex and facsimile transmission and delivery expenses as are expressly provided in the deposit agreement to be at the expense of the person depositing or withdrawing our common shares or holders and beneficial owners of ADSs;
- (d) the expenses and charges incurred by the depositary in the conversion of foreign currency;
- (e) such fees and expenses as are incurred by the depositary in connection with compliance with exchange control regulations and other regulatory requirements applicable to our common shares, deposited securities, ADSs and ADRs; and
- (f) the fees and expenses incurred by the depositary, the custodian, or any nominee in connection with the delivery or servicing of deposited securities.

Reimbursement of Fees and Direct and Indirect Payments by the Depositary

The depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

In 2018 we received no reimbursements from the depositary for expenses incurred by us relating to the ADR program.

ITEM 13. Defaults, Dividend Arrearages and Delinquencies

None.

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ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

None.

ITEM 15. CONTROLS AND PROCEDURES

We have evaluated, with the participation of our chief executive officer and chief financial officer, the effectiveness of our disclosure controls and procedures (including those related to cybersecurity risks and incidents and their potential impacts) as of December 31, 2018. In addition, since 2017, Bureau Veritas has performed audits of our information security management system under ISO/IEC 27001 and has found it to be effective. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon our evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures (including those related to cybersecurity risks and incidents and their potential impacts) were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to our Management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management’s Report on Internal Control over Financial Reporting

Our Management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our Management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of the effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, and that the degree of compliance with the policies or procedures may deteriorate.

Our Management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2018 based on the updated criteria established in “Internal Control—Integrated Framework” issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013. Based on such assessment and criteria, our Management has concluded that our internal control over financial reporting was effective as of December 31, 2018.

Attestation Report of the Registered Public Accounting Firm

ITEM 16. [RESERVED]

ITEM 16A. Audit Committee Financial Expert

As described in Item 16D below, we have given our fiscal council the necessary powers to qualify for the exemption from the audit committee requirements set forth in Exchange Act Rule 10A-3(c)(3). Our Board of Directors recognizes that one member of our fiscal council, Ran Zhang, qualifies as an audit committee financial expert and meets the applicable independence requirements for fiscal council membership under Brazilian law. He also meets the New York Stock Exchange independence requirements that would apply to audit committee members in the absence of our reliance on the exemption set forth in Exchange Act Rule 10A-3(c)(3). Some of the members of our fiscal council are currently employed by some of our principal shareholders or their affiliates.

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ITEM 16B. Code of Ethics

We consider ethics to be an essential value for our reputation and longevity. Our Ethics Management and Development System (SGDE) aims to turn concerns with ethical behavior into effective practices, focusing on avoiding breaches and promoting development of ethical quality throughout the Organization's actions. The system is composed of a set of provisions, implemented in all of our subsidiaries with direct management. SGDE aims to prevent, monitor, assess, revise and improve individual and institutional actions of the company that directly or indirectly imply in ethical behavior, partially or fully of our stakeholders. Our Code of Ethical Conduct ("Code of Ethics") has a scope that is similar to the one required for a U.S. domestic company under the NYSE rules. We report each year under Item 16B of our annual report on Form 20-F any waivers of the Code of Ethics in favor of our CEO, CFO, principal accounting officer and persons performing similar functions. Besides the initiatives that directly involve our partners, we seek to ensure that our business values are shared by the chain of suppliers through contractual items that require compliance with the Code of Ethics. In our services contracts, there is an exclusive clause regarding the Code of Ethics in the contracting processes. The Code of Ethics governs all relations between companies of the Group and their stakeholders (shareholders, clients, employees, suppliers, service providers, governments, communities and society). The detailed Code of Ethics is available on our website at <https://cpfl.riweb.com.br/show.aspx?idMateria=TJJ0DQFsfdvDqqPuQGIX+Q==&linguagem=en> (This URL is intended to be an inactive textual reference only. It is not intended to be an active hyperlink to our website. The information on our website, which might be accessible through a hyperlink resulting from this URL, is not and shall not be deemed to be, incorporated into this annual report).

ITEM 16C. Principal Accountant Fees and Services

Audit and Non-Audit Fees

The following table sets forth the fees billed to us by our independent registered and public accounting firm during the years ended December 31, 2018 and 2017. Our independent accounting firm was KPMG Auditores Independentes for the years ended December 31, 2018 and 2017.

	Year ended December 31,	
	2018	2017
	(in thousands of reais)	
Audit fees	5,021	4,198
Audit-related fees	735	1,212
Tax fees	1,297	1,296
Total	7,054	6,706

"Audit Fees" are the aggregated fees billed by KPMG Auditores Independentes for the audit of our consolidated and annual financial statements, reviews of interim financial statements and attestation services that are provided in connection with statutory and regulatory filings or engagements for fiscal years 2018 and 2017, respectively.

"Audit-related fees" are fees charged by KPMG Auditores Independentes for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements for the years ended December 31, 2018 and 2017, respectively.

“Tax fees” in the above table are for services related to tax compliance charged by KPMG Auditores Independentes for the years ended December 31, 2018 and 2017, respectively.

Audit Committee Approval Policies and Procedures

Our fiscal council currently serves as our audit committee for purposes of the Sarbanes-Oxley Act of 2002. Our fiscal council has not established pre-approval policies or procedures for recommending the engagement of our independent auditors for services to our Board of Directors. Pursuant to Brazilian law, our Board of Directors is responsible for the engagement of independent auditors. Brazilian law prohibits our independent auditors from providing any consulting services to our subsidiaries, or to us, that may impair their independence.

ITEM 16D. Exemptions from the Listing Standards for Audit Committees

Under the listed company audit committee rules of the NYSE and the SEC, we must comply with Exchange Act Rule 10A-3, which requires that we establish an audit committee composed of members of the Board of Directors that meets specified requirements. We have designated and empowered our fiscal council to perform the role of the audit committee in reliance on the exemption set forth in Exchange Act Rule 10A-3(c)(3). In our assessment, our fiscal council acts independently in performing the responsibilities of an audit committee under the Sarbanes-Oxley Act and satisfies the other requirements of Exchange Act Rule 10A-3.

ITEM 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

ITEM 16F. Change in Registrant’s Certifying Accountant

None.

ITEM 16G. Corporate Governance

The following chart summarizes the ways that our corporate governance practices differ from those followed by domestic companies under the listing standards under the New York Stock Exchange:

Section of the New York Stock Exchange Listed Company Manual	New York Stock Exchange Listing Standard	Ways that CPFL’s Corporate Governance Practices Differ from Those Followed by Domestic Companies Listed on the New York Stock Exchange
303A.01	A company listed on the New York Stock Exchange (a “listed company”) must have a majority of independent directors on its Board of Directors. “Controlled companies” are not required to comply with this requirement.	CPFL is a controlled company, because more than a majority of its voting power is controlled by State Grid Brazil Power Participações S.A., an indirect subsidiary of State Grid Corporation of China. As a controlled company, CPFL would not be required to comply with the majority of independent directors requirements if it were a U.S. domestic issuer. CPFL has two independent director, as defined by the B3 rules.
303A.03	The non-Management directors of a listed company must meet at regularly scheduled executive sessions without Management.	The non-Management directors of CPFL do not meet at regularly scheduled executive sessions without Management.
303A.04	A listed company must have a Nominating/Corporate Governance	As a controlled company, CPFL would not be required to comply with the

Committee composed entirely of independent directors, with a written charter that covers certain minimum specified duties. “Controlled companies” are not required to comply with this requirement.

303A.05

A listed company must have a compensation committee composed entirely of independent directors, with a written charter that covers certain minimum specified duties. “Controlled companies” are not required to comply with this requirement.

As a controlled company, CPFL would not be required to comply with the compensation committee requirements. The Human Resources Management Committee of CPFL is an advisory committee of the Board of Directors. It has three members, none of whom is independent. According to its charter, this committee is responsible for assisting the Board of Directors by: (i) coordinating the CEO selection process; (ii) monitoring the selection process of the Vice-Presidents of CPFL Energia and CEOs of controlled companies; (iii) defining criteria for compensation of the executive officers, including long- and short-term incentive plans, (iv) defining performance goals of the executive officers, (v) coordinating evaluation procedures of the executive officers, (vi) preparation of the plan of succession for executive officers and (vii) monitoring the execution of human resources policies and practices and preparing improvement proposals when necessary.

303A.06 and 303A.07

A listed company must have an audit committee with a minimum of three independent directors that satisfy the independence requirements of Rule 10A-3 under the Exchange Act, with a written charter that covers certain minimum specified duties.

In lieu of appointing an audit committee composed of independent members of the Board of Directors, CPFL has a permanent *Conselho Fiscal*, or fiscal council, in accordance with the applicable provisions of the Brazilian Corporate Law, and CPFL has granted the fiscal council with additional powers that meet the requirements of Exchange Act Rule 10A-3(c)(3). Under Brazilian Corporate Law, which enumerates standards for the independence of the fiscal council from CPFL and its Management, none of the members of the fiscal council may be: (i) members of the Board of Directors; (ii) members of the board of executive officers; (iii) employed by CPFL or an affiliate or company controlled by CPFL or (iv) a spouse or relative, to a certain degree, of any member of our Management or Board of Directors. Members of the fiscal council are elected at the company’s general shareholders’ meeting

		for a one-year term of office. The fiscal council of CPFL currently has three members, all of whom comply with standards (i) to (iv) above. The responsibilities of the fiscal council, which are set forth in its charter, includes reviewing Management's activities and the company's financial statements, and reporting findings to the company's shareholders.
303A.08	Shareholders must be given the opportunity to vote on all equity-compensation plans and material revisions thereto, with limited exemptions set forth in the NYSE rules.	Under Brazilian Corporate Law, shareholder pre-approval is required for the adoption of any equity compensation plans.
303A.09	A listed company must adopt and disclose corporate governance guidelines that cover certain minimum specified subjects.	CPFL has formal corporate governance guidelines that address the matters specified in the NYSE rules. CPFL's corporate governance guidelines are available on http://www.cpfl.com.br/ir .
303A.10	A listed company must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers.	CPFL has a formal Code of Ethics that applies to its directors, officers, employees and direct controlling shareholders. CPFL's Code of Ethics has a scope that is similar, but not identical, to that required for a U.S. domestic company under the NYSE rules. CPFL reports each year under Item 16B of our annual report on Form 20-F any waivers of the code of ethics in favor of our chief executive officer, our chief financial officer, our principal accounting officer and persons performing similar functions. We will disclose such amendment or waiver on our website.
303A.12	Each listed company CEO must certify to the NYSE each year that he or she is not aware of any violation by the company of NYSE corporate governance listing standards.	CPFL's CEO provides to the NYSE a Foreign Private Issuer Annual Written Affirmation, and he will promptly notify the NYSE in writing after any executive officer of CPFL becomes aware of any material non-compliance with any applicable provisions of the NYSE corporate governance rules.

ITEM 16H. Mine Safety Disclosure

Not applicable.

ITEM 17. Financial Statements

Not applicable.

ITEM 18. Financial Statements

See pages F-1 through F-88, incorporated herein by reference.

ITEM 19. Exhibits

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No.	Description
<u>1.1</u>	<u>Amended and Restated Bylaws of CPFL Energia S.A. (together with an English version).</u>
<u>8.1</u>	<u>List of subsidiaries, their jurisdiction of incorporation and names under which they do business.</u>
<u>12.1</u>	<u>Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>12.2</u>	<u>Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>13.1</u>	<u>Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
<u>13.2</u>	<u>Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>

The amount of long-term debt securities of CPFL Energia or its subsidiaries authorized under any outstanding agreement does not exceed 10.0% of CPFL Energia's total assets on a consolidated basis. CPFL Energia hereby agrees to furnish the SEC, upon its request, a copy of any instruments defining the rights of holders of its long-term debt or of its subsidiaries for which consolidated or unconsolidated financial statements are required to be filed.

GLOSSARY OF TERMS

ABRACEEL: Brazilian Association of Electricity Traders (*Associação Brasileira dos Comercializadores de Energia*).

ABRADEE: Brazilian Association of Electric Energy Distributors (*Associação Brasileira de Distribuidores de Energia Elétrica*).

ACR Account: The ACR account, created by Decree No. 8,221/2014, aims to cover all or part of the costs incurred by distribution utilities in the period from February to December 2014, due to (i) involuntary exposure in the spot market and (ii) thermoelectric dispatch regarding CCEAR.

ADRs: American Depositary Receipts.

ADSs: American Depositary Shares.

ANEEL: Brazilian Electricity Regulatory Agency (*Agência Nacional de Energia Elétrica*).

Annual Reference Value: Mechanism which limits the amounts of costs that can be passed through to Final Consumers. The Annual Reference Value corresponds to the weighted average of electricity acquisition costs resulting from electricity prices of all public auctions carried out by ANEEL and CCEE in the Regulated Market for electricity to be delivered five and three years from any such auction and only applies during the first three years following the commencement of delivery of the acquired electricity.

Assured Energy: Amount of energy that generators are allowed to sell in long-term contracts.

B3: B3 S.A.-Brasil Bolsa e Balcão. Created in March 2017 by the merger of BM&FBOVESPA and CETIP, B3 is a new financial market infrastructure company that consolidates BM&FBOVESPA's activities in listed products trading and post-trading and CETIP's activities in registration and depositary services for over-the-counter securities and financing.

Basic Network: Interconnected transmission lines, dams, energy transformers and equipment with voltage equal to or higher than 230 kV, or installations with lower voltage as determined by ANEEL.

Basic Network Charges: Amounts related to the provision of transmission services owed by users to the transmission concessionaires and to the ONS, calculated by the product of the transmission tariff for the basic network and the amount used. These amounts are charged at the distributor's rate and passed on to the transmission concessionaires.

Biomass Thermoelectric Power Plant: a generator which uses the combustion of organic matter for the production of energy.

BNDES: Brazilian Economic and Social Development Bank (*Banco Nacional de Desenvolvimento Econômico e Social*).

Brazilian Corporate Law: Federal Law No. 6,404, enacted on December 15, 1976, which governs, among other things, corporations (*sociedade por ações*) and the rights and duties of their shareholders, directors and officers.

CADE: Administrative Council for Economic Defense (*Conselho Administrativo de Defesa Econômica*).

Capacity Agreement: Agreement under which a generator commits to make a certain amount of capacity available to the Regulated Market. In such case, the generator's revenue is guaranteed and the distributors must bear the risk of a supply shortage.

Captive Consumers: Consumers in a Captive Market that acquire energy from the distribution company or holder of a permit to whose network the consumer is connected. Captive Consumers include all residential consumers, as well as certain companies, industries and rural consumers.

Captive Market: Market segment in which each Captive Consumer is obliged to purchase electricity solely from the local distributor. In the Captive Market, tariffs are determined by ANEEL and not subject to negotiation.

CCC Account: Fuel Usage Quota Account (*Conta de Consumo de Combustível*).

CCEAR: Agreements on Energy Commercialization in the Regulated Market (*Contratos de Comercialização de Energia no Ambiente Regulado*).

CCEE: Electric Energy Trading Chamber (*Câmara de Comercialização de Energia Elétrica*). The short-term electricity market, established in 1998 through the Power Industry Law, which replaced the prior system of regulated generation prices and supply contracts, formerly known as the Wholesale Energy Market.

CCRBT: Tariff Flag Resources Centralizing Account (*Conta Centralizadora dos Recursos de Bandeiras Tarifárias*).

CDE Account: Energetic Development Account (*Conta de Desenvolvimento Energético*).

CFURH: Financial Compensation for the Use of Water Resources (*Compensação Financeira pela Utilização de Recursos Hídricos*).

CMN: Brazilian Monetary Council (*Conselho Monetário Nacional*).

CNPE: National Energy Policy Council (*Conselho Nacional de Política Energética*).

COFINS: Contribution for the financing of social security (*contribuição para o financiamento da seguridade social*) tax.

Concession Law: Federal Law No. 8,987, enacted on February 13, 1995, which establishes, among other things, the conditions that the concessionaire must comply with when providing electricity services, the rights of consumers, and the obligations of the concessionaire and the granting authority.

Conventional Free Consumers: Consumers whose contracted energy demand is at least 3 MW. These consumers may opt to purchase conventional energy, entirely or partially, from another authorized selling agent under the terms of current legislation. We refer to consumers who have exercised this option as “Conventional Free Consumers,” and those who meet the demand requirements but have not exercised the option to migrate to the Free Market as “Potential Conventional Free Consumers.”

CPFL Santa Cruz: “CPFL Santa Cruz” refers to the surviving company of the merger of Companhia Luz e Força Santa Cruz, CPFL Leste Paulista, CPFL Sul Paulista and CPFL Mococa into CPFL Jaguari. (This surviving corporate entity was previously named Companhia Jaguari de Energia, or CPFL Jaguari.)

CSLL: Social Contribution on Net Profits (*Contribuição Social sobre o Lucro Líquido*).

CVM: Brazilian Securities Commission (*Comissão de Valores Mobiliários*).

Distribution Network: Electric network system that distributes energy to end consumers within a concession area.

Distributor: An entity supplying electric energy to a group of consumers by means of a Distribution Network.

EER: Reserve Energy Charge (*Encargo de Energia de Reserva*).

Energy Agreement: Agreement under which a generator commits to supply a certain amount of electricity and assumes the risk that its electricity supply could be adversely affected by hydrological conditions and low reservoir levels, which could interrupt the supply of electricity. In such a case, the generator would be required to purchase electricity elsewhere in order to comply with its supply commitments.

EPE: Energetic Studies Company (*Empresa de Pesquisas Energéticas*).

ESS: System Service Charge (*Encargo de Serviço do Sistema*).

Final Consumer: A party that uses electricity for its own needs.

Free Consumer: Consumers that may choose to purchase electricity through negotiations with any available electricity distributor.

Free Market: Market segment that permits a certain degree of competition (*Ambiente de Contratação Livre – ACL*). The Free Market specifically contemplates purchases of electricity by non-regulated entities such as Free Consumers and energy traders.

GDP: Gross Domestic Product.

Gigawatt (GW): One billion Watts.

Gigawatt average (GWavg): Average of GWh.

Gigawatthour (GWh): One gigawatt of power supplied or demanded for one hour, or one billion Watt hours.

High Voltage: A class of nominal system voltages greater than 138 kV and equal to or lower than 230 kV.

Hydroelectric Facility: A power plant that uses hydraulic water power for the production of electricity.

Hydroelectric Power Plant: A generator that uses water power to drive the electric generator.

IASB: The International Accounting Standards Board.

ICMS: State-level value-added tax (*Imposto sobre Operações Relativas à Circulação de Mercadorias e Prestação de Serviços de Transporte Interestadual e Intermunicipal e de Comunicação*).

IFRS: International Financial Reporting Standards.

IGP-M: Market General Price Index (*Índice Geral de Preços – Mercado* published by *Fundação Getúlio Vargas*).

Independent Power Producer: A legal entity or consortium holding a concession or authorization for power generation for sale for its own account to public utility concessionaires.

Installed Capacity: The level of electricity which can be delivered from a particular generator on a full-load continuous basis under specified conditions as designated by the manufacturer.

Interconnected Power System: Systems or networks for the transmission of energy, connected together by means of one or more links (lines and/or transformers).

IPCA: Broad consumer price index (*Índice Nacional de Preços ao Consumidor Amplo*, calculated and published by *Instituto Brasileiro de Geografia e Estatística*).

IRPJ: Corporate income tax (*Imposto de Renda – Pessoa Jurídica*).

ISS: Tax on services (*imposto sobre serviços*).

Kilovolt (kV): One thousand volts.

Kilowatt (kW): One thousand Watts.

Kilowatthour (kWh): One kilowatt of power supplied or demanded for one hour, or one thousand Watt hours.

Low Voltage: According to ANEEL, a class of nominal system voltages equal to or lower than 2.3 kV.

Medium Voltage: A class of nominal system voltages greater than 2.3 kV and equal to or lower than 138 kV.

Megawatt (MW): One million Watts.

Megawatthour (MWh): One megawatt of power supplied or demanded for one hour, or one million Watt hours.

Megawatt-peak (MWp): The measure of the nominal power of a photovoltaic solar device under laboratory lighting conditions.

Micro Hydroelectric Power Plants: Power projects with capacity lower than 1 MW.

MME: Brazilian Ministry of Mines and Energy (*Ministério de Minas e Energia*).

MRE: Energy Reallocation Mechanism (*Mecanismo de Realocação de Energia*).

MVA: Mega Volt Ampère.

ONS: National Electric System Operator (*Operador Nacional do Sistema Elétrico*).

Parcel A Costs: Costs that are not under the control of the Distributor, including, among others, the following: (i) costs of electricity purchased pursuant to CCEARs; (ii) costs of electricity purchased from Itaipu; (iii) costs of electricity purchased pursuant to bilateral agreements that are freely negotiated between parties; and (iv) certain other charges for the transmission and distribution systems.

Parcel B Costs: Costs that are under control of distributors. Such costs are determined by subtracting all of the Parcel A costs from the distribution company's revenues, excluding ICMS and PIS/COFINS, a state and federal tax levied on sales. Parcel B costs include, among others, the return on investment in assets necessary to energy distribution activities, as well as maintenance and operational costs.

PFIC: A passive foreign investment company.

PIS: Program of social integration (*programa de integração social*) tax.

PLD: Spot price used to evaluate the energy traded in the spot market (*Preço de Liquidação de Diferenças*).

Potential Conventional Free Consumers: Consumers who meet the relevant contracted demand requirements but have not exercised the option to migrate to the free market as Conventional Free Consumers.

Potential Free Consumer: Consumer that meets all the requirements established for migration to the Free Market, but still chooses to be serviced by the relevant concessionaire.

Potential Special Free Consumers: Consumers who meet the relevant contracted demand requirements but have not exercised the option to migrate to the free market as Special Free Consumers.

Proinfa Program: Electric Energy Alternative Sources Incentive Program (*Programa de Incentivo às Fontes Alternativas de Energia Elétrica*).

Rationing Program: The Brazilian government program to reduce electricity consumption that was in effect from June 1, 2001 to February 28, 2002 as a result of poor hydrological conditions that threatened the country's electricity supply.

Regulated Market: Market segment in which distribution companies purchase all the electricity needed to supply customers through public auctions. The auction process is administered by ANEEL, either directly or through CCEE, under certain guidelines provided by the MME. The Regulated Market is generally considered to be more stable in terms of supply of electricity.

Retail Distribution Tariff: Revenue charged by distribution companies to its customers. Each customer falls within a certain tariff level defined by law and based on the customer's classification, although some flexibility is available according to the nature of each customer's demand. Retail tariffs are subject to annual readjustments by ANEEL.

RGE: Rio Grande Energia S.A., prior to the merger of Rio Grande Energia S.A. into RGE Sul Distribuidora de Energia S.A. Post-merger, RGE Sul Distribuidora de Energia S.A.

RGE Sul: RGE Sul Distribuidora de Energia S.A., prior to the merger of the merger of Rio Grande Energia S.A. into RGE Sul Distribuidora de Energia S.A.

RGR Fund: Global Reversion Reserve Fund (*Fundo da Reserva Global de Reversão – RGR*).

RTA: Annual Tariff Adjustment (*reajuste tarifário annual*).

RTE: Extraordinary Tariff Adjustment (*reajuste tarifário extraordinário*).

RTP: Periodic Tariff Revision (*revisão tarifária periódica*).

SAIDI: System Average Interruption Duration Index.

SAIFI: System Average Interruption Frequency Index.

SDE: Economic Law Department of the Ministry of Justice (*Secretaria de Direito Econômico*).

SDGs: United Nations Sustainable Development Goals, 17 sustainable development goals established by the United Nations and 169 specific targets that apply to all countries and cover a broad range sustainability issues, including poverty, hunger, health, education, climate change, gender equality, water, sanitation, energy, environment and social justice. See [//sustainabledevelopment.un.org/sdgs](https://sustainabledevelopment.un.org/sdgs) for more information.

SEC: U.S. Securities and Exchange Commission.

SHPP or Small Hydroelectric Power Plants: Power projects with capacity from 3 MW to 30 MW.

SISBACEN: Central Bank's Information System (*Sistema de Informações do Banco Central*).

Solar Power Plant: a structure capable of transforming solar energy electric energy.

Special Free Consumers or Special Consumers: Individual or groups of consumers whose contracted energy demand is between 500 kW and 3 MW. Special Free Consumers may only purchase energy from renewable sources: (i) Small Hydroelectric Power Plants with capacity superior to 3,000 kW and equal or inferior to 30,000 kW, (ii) hydroelectric generators with capacity superior to 3,000 kW and equal or inferior to 50,000 kW, under the independent power production regime; (iii) generators with capacity limited to 3,000 kW, and (iv) alternative energy generators (solar, wind and biomass enterprises) with system capacity not greater than 50,000 kW.

Substation: An assemblage of equipment which switches and/or changes or regulates the voltage of electricity in a transmission and distribution system.

TE: Energy Tariff (*Tarifa de Energia*).

TFSEE: Tax on the Supervision of Electrical Services (*Taxa de Fiscalização de Serviços de Energia Elétrica*).

Thermoelectric Power Plant: A generator which uses combustible fuel, such as coal, oil, diesel natural gas or other hydrocarbon as the source of energy to drive the electric generator.

TJLP: Long-term interest rate (*taxa de juros ao longo prazo*) published by the Central Bank.

Transmission: The bulk transfer of electricity from generating facilities to the distribution system at load center station by means of the transmission network (in lines with capacity between 69 kV and 525 kV).

Transmission Tariff: Revenue charged by a transmission concessionaire based on the transmission network it owns and operates. Transmission tariffs are subject to periodic revisions by ANEEL.

TSEE: Social Tariff for Electricity (*Tarifa Social de Energia Elétrica*).

TUSD: Tariff for the Use of the Distribution System (*Tarifa de Uso dos Sistemas Elétricos de Distribuição*).

TUST: Tariff for the Use of the Transmission System (*Tarifa de Uso dos Sistemas Elétricos de Transmissão*).

UBP: Use of a Public Asset (*Uso de Bem Público*).

Volt: The basic unit of electric force analogous to water pressure in pounds per square inch.

Watt: The basic unit of electrical power.

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant, CPFL Energia S.A., hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Campinas, in the state of São Paulo, Brazil, on April 22, 2019.

CPFL ENERGIA S.A.

By: /s/ Gustavo Estrella
Name: Gustavo Estrella
Title: Chief Executive Officer

By: /s/ Yuehui Pan
Name: Yuehui Pan
Title: Chief Financial Officer

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
CPFL Energia S.A.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated statements of financial position of CPFL Energia S.A. and subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2018, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2018, in conformity with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018 based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting under Item 15 of the Company's Form 20-F. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated

financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

We have served as the Company's auditor since 2017.

/s/ KPMG Auditores Independentes

Campinas, São Paulo - Brazil
April 22, 2019

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of

CPFL Energia S.A.

Campinas - SP

We have audited the accompanying consolidated statements of income, comprehensive income, shareholders' equity and cash flows of CPFL Energia S.A. and subsidiaries (the "Company") for the year ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the results of operations and cash flows of CPFL Energia S.A. and subsidiaries for the year ended December 31, 2016, in accordance with International Financial Reporting Standards - IFRS, issued by the International Accounting Standards Board - IASB.

Campinas, São Paulo, Brazil

SIGNATURES

April 17, 2017

/s/ DELOITTE TOUCHE TOHMATSU

Auditores Independentes

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CPFL ENERGIA S.A. AND SUBSIDIARIES**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION AT DECEMBER 31, 2018 AND 2017**

(In thousands of Brazilian reais - R\$)

ASSETS	Note	Dec 31, 2018	Dec 31, 2017
CURRENT ASSETS			
Cash and cash equivalents	5	1,891,457	3,249,642
Consumers, concessionaires and licensees	6	4,547,951	4,301,283
Dividend and interest on capital	12	100,182	56,145
Income tax and social contribution recoverable	7	123,739	88,802
Other taxes recoverable	7	287,517	306,244
Derivatives	33	309,484	444,029
Sector financial asset	8	1,330,981	210,834
Concession financial asset	10	-	23,736
Other assets	11	811,005	900,498
TOTAL CURRENT ASSETS		9,402,316	9,581,211
NONCURRENT ASSETS			
Consumers, concessionaires and licensees	6	752,795	236,539
Associates, subsidiaries and parent company	30	-	8,612
Escrow Deposits	21	854,374	839,990
Income tax and social contribution recoverable	7	67,966	61,464
Other taxes recoverable	7	185,725	171,980
Sector financial assets	8	223,880	355,003
Derivatives	33	347,507	203,901
Deferred tax assets	9	956,380	943,199
Concession financial asset	10	7,430,149	6,545,668
Investments at cost		116,654	116,654
Other assets	11	927,440	840,192
Investments	12	980,362	1,001,550
Property, Plant and Equipment	13	9,456,614	9,787,125
Contract asset – in progress	14	1,046,433	-
Intangible assets	14	9,462,935	10,589,824
TOTAL NONCURRENT ASSETS		32,809,214	31,701,702
TOTAL ASSETS		42,211,530	41,282,912

The accompanying notes are an integral part of these consolidated financial statements.

CPFL ENERGIA S.A. AND SUBSIDIARIES**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION AT DECEMBER 31, 2018 AND 2017**

(In thousands of Brazilian reais - R\$)

LIABILITIES AND EQUITY	Note	Dec 31, 2018	Dec 31, 2017
CURRENT LIABILITIES			
Trade payables	15	2,398,085	3,296,870
Borrowings	16	2,446,113	3,589,607
Debentures	17	917,352	1,703,073
Private pension plan	18	86,623	60,801
Regulatory charges	19	150,656	581,600
Income tax and social contribution payable	20	100,450	81,457
Other taxes, fees and contributions	20	664,989	628,846
Dividends		532,608	297,744
Estimated payroll		119,252	116,080
Derivatives	33	8,139	10,230
Sector financial liability	8	-	40,111
Use of public asset		11,570	10,965
Other payables	22	979,296	961,306
TOTAL CURRENT LIABILITIES		8,415,132	11,378,688
NONCURRENT LIABILITIES			
Trade payables	15	333,036	128,438
Borrowings	16	8,989,846	7,402,450
Debentures	17	8,023,493	7,473,454
Private pension plan	18	1,156,639	880,360
Other taxes, fees and contributions	20	9,691	18,839
Deferred tax liabilities	9	1,136,227	1,249,591
Provision for tax, civil and labor risks	21	979,360	961,134
Derivatives	33	23,659	84,576
Sector financial liability	8	46,703	8,385
Use of public asset		89,965	83,766
Other payables	22	475,396	426,889
TOTAL NONCURRENT LIABILITIES		21,264,015	18,717,880
EQUITY			
	23		
Issued capital		5,741,284	5,741,284
Capital reserves		469,257	468,014
Legal reserve		900,992	798,090
Statutory reserve - concession financial asset		-	826,600

SIGNATURES

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Statutory reserve - working capital improvement	3,527,510	1,292,046
Accumulated comprehensive income	(376,294)	(164,506)
	10,262,749	8,961,528
Equity attributable to noncontrolling interests	2,269,634	2,224,816
TOTAL EQUITY	12,532,383	11,186,344
TOTAL LIABILITIES AND EQUITY	42,211,530	41,282,912

The accompanying notes are an integral part of these consolidated financial statements.

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CPFL ENERGIA S.A. AND SUBSIDIARIES**CONSOLIDATED STATEMENTS OF INCOME****FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 and 2016****(In thousands of Brazilian reais - R\$, except for earnings per share)**

	Note	2018	2017	2016
NET OPERATING REVENUE	25	28,136,627	26,744,905	19,112,089
COST OF ELECTRIC ENERGY SERVICES				
Cost of electric energy	26	(17,838,165)	(16,901,518)	(11,200,242)
Cost of operation	27	(2,733,754)	(2,771,145)	(2,248,795)
Cost of services rendered to third parties	27	(1,775,339)	(2,074,611)	(1,357,032)
GROSS PROFIT		5,789,369	4,997,632	4,306,020
Operating expenses	27			
Allowance for doubtful accounts		(169,259)	(155,097)	(176,349)
Other sales expenses		(438,925)	(435,135)	(370,902)
General and administrative expenses		(987,291)	(947,072)	(849,416)
Other Operating Expense		(485,427)	(438,494)	(386,746)
INCOME FROM ELECTRIC ENERGY SERVICES		3,708,467	3,021,834	2,522,608
Equity interests in associates and joint ventures	12	334,198	312,390	311,414
FINANCIAL INCOME (EXPENSES)	28			
Financial income		762,413	880,314	1,200,503
Financial expenses		(1,865,100)	(2,367,868)	(2,653,977)
		(1,102,687)	(1,487,554)	(1,453,474)
PROFIT BEFORE TAXES		2,939,977	1,846,670	1,380,547
Social contribution	9	(213,673)	(168,728)	(150,859)
Income tax	9	(560,310)	(434,901)	(350,631)
		(773,982)	(603,629)	(501,490)
PROFIT FOR THE YEAR		2,165,995	1,243,042	879,057
Profit attributable to the owners of the Company		2,058,040	1,179,750	900,885
Profit (loss) attributable to noncontrolling interests		107,955	63,292	(21,828)

Earnings per share attributable to owners of the
Company:

Basic	24	2.02	1.16	0.89
Diluted	24	2.01	1.15	0.87

The accompanying notes are an integral part of these consolidated financial statements.

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CPFL ENERGIA S.A. AND SUBSIDIARIES**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME****FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 and 2016****(In thousands of Brazilian reais - R\$)**

	2018	2017	2016
Profit for the year	2,165,995	1,243,042	879,057
Other comprehensive income			
Items that will not be reclassified subsequently to profit and loss			
- Actuarial gains (losses), net of tax effects	(238,780)	96,000	(394,175)
Items that will be reclassified subsequently to profit or loss			
- Credit risk in mark to market of financial liabilities	17,963	-	-
Total Comprehensive income for the year	1,945,178	1,339,042	484,882
Attributable to owners of the Company	1,837,223	1,275,750	506,709
Attributable to noncontrolling interests	107,955	63,292	(21,828)

The accompanying notes are an integral part of these consolidated financial statements.

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CPFL ENERGIA S.A. AND SUBSIDIARIES**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 and 2016**

(In thousands of Brazilian reais - R\$)

	Issued capital	Capital reserves	Legal reserve	Earning reserves		Dividends	Accumulated comprehensive income		Retained earnings
				Concession financial asset	Statutory reserves Working capital improvement		Deemed cost	Private pension plan	
Balance at December 31, 2015	5,348,312	468,082	694,058	585,450	392,972	-	457,491	(272,170)	
Total comprehensive income									
Profit for the year	-	-	-	-	-	-	-	-	9
Other comprehensive income - actuarial gains	-	-	-	-	-	-	-	(394,175)	
Internal changes of shareholders' equity									
Realization of deemed cost of property, plant and equipment	-	-	-	-	-	-	(39,058)	-	
Tax on realization of deemed cost	-	-	-	-	-	-	13,280	-	(
Recognition of legal reserve	-	-	45,044	-	-	-	-	-	(
Changes in statutory reserve in the year	-	-	-	117,478	545,505	-	-	-	(6
Other changes in noncontrolling interests	-	-	-	-	-	-	-	-	

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Capital transactions with owners

Capital increase	392,972	-	-	-	(392,972)	-	-	-
Prescribed dividends	-	-	-	-	-	-	-	-
Additional dividend proposed	-	-	-	-	-	7,820	-	-
Dividend distributed to noncontrolling interests	-	-	-	-	-	-	-	-
Dividend proposal approved	-	-	-	-	-	-	-	-
Capital increase in subsidiaries with no change in control	-	(68)	-	-	-	-	-	-

Balance at December 31, 2016

	5,741,284	468,014	739,102	702,928	545,505	7,820	431,713	(666,346)
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Total comprehensive income

Profit for the year	-	-	-	-	-	-	-	-	1,1
Other comprehensive income - actuarial gains	-	-	-	-	-	-	-	96,000	

Internal changes of shareholders' equity

Realization of deemed cost of property, plant and equipment	-	-	-	-	-	-	(39,202)	-
Tax on realization of deemed cost	-	-	-	-	-	-	13,329	-
Recognition of legal reserve	-	-	58,988	-	-	-	-	-
Changes in statutory reserve in the year	-	-	-	123,673	746,541	-	-	-

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Other changes in noncontrolling interests	-	-	-	-	-	-	-	-	-
Capital transactions with owners									
Capital increase (reduction)	-	-	-	-	-	-	-	-	-
Prescribed dividends	-	-	-	-	-	-	-	-	-
Interim dividends	-	-	-	-	-	-	-	-	-
Dividend proposal approved	-	-	-	-	-	(7,820)	-	-	(20,000)
Balance at December 31, 2017	5,741,284	468,014	798,090	826,600	1,292,046	-	405,840	(570,346)	
Total comprehensive income									
Profit for the year	-	-	-	-	-	-	-	-	2,000,000
Other comprehensive income - credit risk in mark to market of financial liabilities	-	-	-	-	-	-	-	52,109	(52,109)
Effects of first adoption of IFRS 9	-	-	-	-	-	-	-	-	(4,000,000)
Other comprehensive income - actuarial gains	-	-	-	-	-	-	-	(238,780)	
Internal changes of shareholders' equity									
Realization of deemed cost of property, plant and equipment	-	-	-	-	-	-	(38,057)	-	
Tax on realization of deemed cost	-	-	-	-	-	-	12,939	-	(12,939)
	-	-	-	-	-	-	-	-	(12,939)

Recognition of legal reserve			102,902						
Changes in statutory reserve in the year	-	-	-	(826,600)	2,235,465	-	-	-	(1,400,000)
Other changes in noncontrolling interests	-	5	-	-	-	-	-	-	-
Capital transactions with owners									
Interim dividends	-	-	-	-	-	-	-	-	-
Dividend proposal approved	-	-	-	-	-	-	-	-	(400,000)
Other changes	-	1,238	-	-	-	-	-	-	-
Balance at December 31, 2018	5,741,284	469,257	900,992	-	3,527,510	-	380,721	(757,016)	

The accompanying notes are an integral part of these consolidated financial statements

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CPFL ENERGIA S.A. AND SUBSIDIARIES**CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 and 2016**

(In thousands of Brazilian reais – R\$)

	2018	2017	2016
OPERATING CASH FLOW			
Profit before taxes	2,939,977	1,846,670	1,380,547
ADJUSTMENT TO RECONCILE PROFIT TO CASH FROM OPERATING ACTIVITIES			
Depreciation and amortization	1,594,064	1,529,052	1,291,165
Provision for tax, civil and labor risks	153,977	176,609	228,292
Allowance for doubtful accounts	169,259	155,097	176,349
Interest on debts, inflation adjustment and exchange rate changes	1,117,742	1,863,311	2,052,959
Pension plan expense	89,909	113,898	76,638
Equity interests in associates and joint ventures	(334,198)	(312,390)	(311,414)
Impairment	-	20,437	48,291
Loss on disposal of noncurrent assets	216,275	132,195	83,576
Deferred taxes (PIS and COFINS)	(457)	963	(8,579)
Others	(26,595)	(19,074)	(1,832)
	5,919,953	5,506,768	5,015,992
DECREASE (INCREASE) IN OPERATING ASSETS			
Consumers, concessionaires and licensees	(1,006,291)	(722,406)	(205,828)
Dividends and interest on capital received	311,347	730,178	83,356
Taxes recoverable	92,090	68,184	128,453
Escrow deposits	22,926	(248,128)	756,171
Sectorial financial asset	(846,216)	(425,004)	2,494,223
Receivables - amounts from the Energy Development Account - CDE / CCEE	59,196	(29,354)	186,052
Concession financial assets (transmission companies)	-	(56,665)	(55,134)
Other operating assets	(47,835)	91,607	265,404
INCREASE (DECREASE) IN OPERATING LIABILITIES			
Trade payables	(848,880)	565,945	(782,963)
Other taxes and social contributions	(59,102)	(261,194)	(63,986)
Other liabilities with private pension plan	(107,668)	(79,724)	(77,183)
Regulatory charges	(430,944)	215,522	(514,935)
Tax, civil and labor risks paid	(215,873)	(206,788)	(216,998)
Sectorial financial liability	(64,361)	(1,089,592)	288,144
Payables - amounts provided by the CDE	71,779	17,544	(70,907)
Other operating liabilities	176,308	141,759	(148,967)

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CASH FLOWS PROVIDED BY OPERATIONS	3,026,428	4,218,652	7,080,894
Interest paid on debts and debentures	(1,353,339)	(1,846,453)	(1,570,985)
Income tax and social contribution paid	(816,402)	(338,175)	(875,883)
NET CASH FROM OPERATING ACTIVITIES	856,686	2,034,024	4,634,026
INVESTING ACTIVITIES			
Price paid in business combination net of cash acquired	-	-	(1,496,675)
Purchases of property, plant and equipment	(275,986)	(685,856)	(1,026,867)
Purchases of contract asset – in progress	(1,769,573)	-	-
Purchases of intangible assets	(16,864)	(1,884,577)	(1,211,082)
Securities, pledges and restricted deposits	212,831	(93,933)	(125,517)
Capital reduction in investees	(1,096)	91,599	-
Sale of noncurrent assets	-	26,807	-
Intragroup loans	-	36,639	44,922
NET CASH USED IN INVESTING ACTIVITIES	(1,850,687)	(2,509,321)	(3,815,219)
FINANCING ACTIVITIES			
Capital increase by noncontrolling interests	7,994	(122,791)	467
Borrowings and debentures raised	9,610,814	3,398,084	3,774,355
Repayment of principal of borrowings and debentures	(10,204,257)	(5,273,261)	(4,016,693)
Repayment of derivatives	543,427	(102,641)	158,242
Dividends and interest on capital paid	(322,163)	(336,934)	(231,749)
Repayment for business combinations	-	(2,514)	(21,234)
NET CASH GENERATED BY (USED IN) FINANCING ACTIVITIES	(364,185)	(2,440,057)	(336,612)
NET INCREASE IN CASH AND CASH EQUIVALENTS	(1,358,186)	(2,915,354)	482,195
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	3,249,642	6,164,996	5,682,802
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	1,891,457	3,249,642	6,164,997

The accompanying notes are an integral part of these consolidated financial statements

CPFL ENERGIA S.A.**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 and 2016****(Amounts in thousands of Brazilian reais – R\$, unless otherwise stated)****(1) OPERATIONS**

CPFL Energia S.A. ("CPFL Energia" or "Company") is a publicly-held corporation incorporated for the principal purpose of operating as a holding company, with equity interests in other companies primarily engaged in electric energy distribution, generation and commercialization activities in Brazil.

The Company's registered office is located at Rodovia Engº Miguel Noel Nascentes Burnier, Km 2,5, Parque São Quirino - Campinas - SP - Brazil.

The Company has direct and indirect interests in the following subsidiaries and joint ventures:

Energy distribution	Company type	Equity interest	Location (state)	Number of municipalities	Approximate number of consumers (in thousands)	Concession period	End of the concession
Companhia Paulista de Força e Luz ("CPFL Paulista")	Publicly-held corporation	Direct 100%	Interior of São Paulo	234	4,496	30 years	November 2027
Companhia Piratininga de Força e Luz ("CPFL Piratininga")	Publicly-held corporation	Direct 100%	Interior and coast of São Paulo	27	1,756	30 years	October 2028
RGE Sul Distribuidora de Energia S.A. ("RGE") (g)	Publicly-held corporation	Direct and Indirect 100%	Interior of Rio Grande do Sul	373	2,871	30 years	November 2027
Companhia Jaguari de Energia ("CPFL Santa Cruz") (e)	Privately-held corporation	Direct 100%	Interior of São Paulo, Paraná and Minas	45	457	30 years	July 2045

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Energy generation (conventional and renewable sources)	Company type	Equity interest	Location (state)	Number of plants / type of energy	Installed power (MW)	
					Total	CPFL share
CPFL Geração de Energia S.A. ("CPFL Geração")	Publicly-held corporation	Direct 100%	São Paulo and Goiás	3 Hydropower plants (a)	1,295	678
CERAN - Companhia Energética Rio das Antas ("CERAN")	Privately-held corporation	Indirect 65%	Rio Grande do Sul	3 Hydropower plants	360	234
Foz do Chapecó Energia S.A. ("Foz do Chapecó")	Privately-held corporation	Indirect 51% (d)	Santa Catarina and Rio Grande do Sul	1 Hydropower plant	855	436
Campos Novos Energia S.A. ("ENERCAN")	Privately-held corporation	Indirect 48.72%	Santa Catarina	1 Hydropower plant	880	429
BAESA - Energética Barra Grande S.A. ("BAESA")	Privately-held corporation	Indirect 25.01%	Santa Catarina and Rio Grande do Sul	1 Hydropower plant	690	173
Centrais Elétricas da Paraíba S.A. ("EPASA")	Privately-held corporation	Indirect 53.34%	Paraíba	2 Thermal plants	342	182
Paulista Lajeado Energia S.A. ("Paulista Lajeado")	Privately-held corporation	Indirect 59.93% (b)	Tocantins	1 Hydropower plant	903	38
CPFL Energias Renováveis S.A. ("CPFL Renováveis")	Publicly-held corporation	Indirect 51.56%	(c)	(c)	(c)	(c)
CPFL Centrais Geradoras Ltda ("CPFL Centrais Geradoras")	Limited liability company	Direct 100%	São Paulo and Minas Gerais	6 small hydropower plants	4	4

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Energy commercialization	Company type	Core activity	Equity interest
CPFL Comercialização Brasil S.A. ("CPFL Brasil")	Privately-held corporation	Energy commercialization	Direct 100%
Clion Assessoria e Comercialização de Energia Elétrica Ltda. ("CPFL Meridional")	Limited liability company	Commercialization and provision of energy services	Indirect 100%
CPFL Comercialização Cone Sul S.A. ("CPFL Cone Sul")	Privately-held corporation	Energy commercialization	Indirect 100%
CPFL Planalto Ltda. ("CPFL Planalto")	Limited liability company	Energy commercialization	Direct 100%
CPFL Brasil Varejista S.A. ("CPFL Brasil Varejista")	Privately-held corporation	Energy commercialization	Indirect 100%
			100%
Provision of services	Company type	Core activity	Equity interest
CPFL Serviços, Equipamentos, Industria e Comércio S.A. ("CPFL Serviços")	Privately-held corporation	Manufacturing, commercialization, rental and maintenance of electro-mechanical equipment and service provision	Direct 100%
NECT Serviços Administrativos Ltda ("Nect")	Limited liability company	Provision of administrative services	Direct 100%
CPFL Atende Centro de Contatos e Atendimento Ltda. ("CPFL Atende")	Limited liability company	Provision of call center services	Direct 100%
CPFL Total Serviços Administrativos Ltda. ("CPFL Total")	Limited liability company	Collection services	Direct 100%
CPFL Eficiência Energética S.A ("CPFL Eficiência")	Privately-held corporation	Energy efficiency management	Direct 100%
TI Nect Serviços de Informática Ltda. ("Authi")	Limited liability company	Provision of IT services	Direct 100%
CPFL GD S.A ("CPFL GD")	Privately-held corporation	Provision of maintenance services for energy generation companies	Indirect 100%
Others	Company type	Core activity	

			Equity interest
CPFL Jaguari de Geração de Energia Ltda ("Jaguari Geração")	Limited liability company	Holding company	Direct
			100%
Chapecoense Geração S.A. ("Chapecoense")	Privately-held corporation	Holding company	Indirect
			51%
Sul Geradora Participações S.A. ("Sul Geradora")	Privately-held corporation	Holding company	Indirect
			99.95%
CPFL Telecom S.A ("CPFL Telecom")	Privately-held corporation	Telecommunication services	Direct
			100%
CPFL Transmissão Piracicaba S.A ("CPFL Piracicaba")	Privately-held corporation	Energy transmission services	Indirect
			100%
CPFL Transmissão Morro Agudo S.A. ("CPFL Morro Agudo")	Privately-held corporation	Energy transmission services	Indirect
			100%
CPFL Transmissão Maracanaú S.A. ("CPFL Maracanaú") (f)	Privately-held corporation	Energy transmission services	Indirect
			100%

a) CPFL Geração has 51.54% of assured energy and power of the Serra da Mesa hydropower plant, whose concession is controlled by Furnas.

b) Paulista Lajeado has a 7% share in the installed power of Investco S.A. (5.94% interest in total capital).

c) CPFL Renováveis has operations in the states of São Paulo, Minas Gerais, Mato Grosso, Santa Catarina, Ceará, Rio Grande do Norte, Paraná and Rio Grande do Sul and its main activities are: (i) holding investments in companies of the renewable energy segment; (ii) identification, development, and exploration of generation potentials; and (iii) sale of electric energy. At December 31, 2018, CPFL Renováveis had a portfolio of 110 projects with installed capacity of 2,480.1 MW (2,132.7 MW in operation), as follows:

- Hydropower generation: 44 SHP's (514.9 MW) with 40 SHPs (small hydroelectric power plants) in operation (453.1 MW) and 4 SHPs under development (61.8 MW);
- Wind power generation: 57 projects (1,594.1 MW) with 45 projects in operation (1,308.5 MW) and 12 projects under construction/development (285.6 MW);
- Biomass power generation: 8 plants in operation (370 MW);
- Solar power generation: 1 solar plant in operation (1.1 MW).

d) The joint venture Chapecoense has as its direct subsidiary Foz do Chapecó and fully consolidates its financial statements.

e) As described in note 14.4.1, on December 31, 2017, approval was given for the merger of the subsidiaries Companhia Luz e Força Santa Cruz, Companhia Leste Paulista de Energia, Companhia Jaguari de Energia, Companhia Sul Paulista de Energia and Companhia Luz e Força de Mococa into Companhia Jaguari de Energia, which adopted the trade name “CPFL Santa Cruz”.

f) In August 2018, CPFL Transmissão Maracanaú S.A. was created, whose objective is the exploration of electric power transmission concessions, including the construction, operation and maintenance of basic network transmission facilities.

g) As described in note 14.5.1, on December 4, 2018 the merger of RGE with RGE Sul was approved. Since January 1, 2019, the operations of these subsidiaries have been carried out only by RGE Sul, which adopted the trade name “RGE”.

(2) PRESENTATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

2.1 Basis of presentation

The financial statements have been prepared in accordance with International Financial Reporting Standards - IFRS, issued by the International Accounting Standard Board – IASB.

Management states that all information material to the financial statements is being disclosed and corresponds to what is used in managing the Group.

The consolidated financial statements were approved by Management and authorized for issue on April 22, 2019.

2.2 Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis except for the following items recorded in the statements of financial position: (i) derivative financial instruments measured at fair value and (ii) non derivative financial instruments measured at fair value through profit or loss. The classification of the fair value measurement in the level 1, 2 or 3 categories (depending on the degree of observance of the inputs used) is presented in note 33 – Financial Instruments.

2.3 Use of estimates and judgments

The preparation of consolidated financial statements requires the Group’s management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses.

By definition, the accounting estimates are rarely the same as the actual results. Accordingly, the Group’s management reviews the estimates and assumptions on an ongoing basis, based on previous experience and other relevant factors. Adjustments resulting from revisions to accounting estimates are recognized in the period in which the estimates are revised and applied on a prospective basis.

The main accounts that require the adoption of estimates and assumptions, which are subject to a greater degree of uncertainty and may result in a material adjustment if these estimates and assumptions suffer significant changes in subsequent periods, are:

- Note 6 – Consumers, Concessionaires and Licensees (Allowance for doubtful accounts: key assumptions regarding the expected credit losses - ECL);
- Note 8 – Sector financial asset and liability (there would be certain new sector related financial components not included in the previous methodology);
- Note 9 – Deferred tax assets and liabilities (recognition of assets: availability of future taxable profit against which the tax losses can be utilized);
- Note 10 – Concession financial asset (assumptions for fair value measurement, based on significant unobservable inputs, see note 33);

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- Note 11 – Other receivables (allowance for doubtful accounts, key assumptions regarding the expected credit losses - ECL);
- Note 13 – Property, plant and equipment (application of definite useful lives and key assumptions regarding recoverable amounts);
- Note 14 – Intangible assets and Contract Assets in progress (key assumptions regarding recoverable amounts);
- Note 18 – Private pension plan (key actuarial assumptions used in the measurement of defined benefit obligations);
- Note 21 – Provision for tax, civil and labor risks and escrow deposits (recognition and measurement: key assumptions on the probability and magnitude of outflow of resources); and
- Note 25 – Net operating revenue (assumptions for measurement of unbilled supply and Distribution System Usage Tariff - TUSD).

2.4 Functional currency and presentation currency

The Group's functional currency is the Brazilian Real, and the financial statements are presented in thousands of reais. Figures are rounded only after sum-up of the amounts. Consequently, when summed up, the amounts stated in thousands of reais may not tally with the rounded totals.

2.5 Segment information

An operating segment is a component of the Company (i) that engages in operating activities from which it earns revenues and incurs expenses, (ii) whose operating results are regularly reviewed by Management to make decisions about resources to be allocated and assess the segment's performance, and (iii) for which individual financial information is available.

The Group's Management use reports to make strategic decisions, segmenting the business into: (i) electric energy distribution activities ("Distribution"); (ii) electric energy generation and transmission from conventional sources activities ("Generation"); (iii) electric energy generation activities from renewable sources ("Renewables"); (iv) energy commercialization activities ("Commercialization"); (v) service activities ("Services"); and (vi) other activities not listed in the previous items.

Beginning in 2018, due to the way our new Management monitors segment results, (i) intangible assets acquired in business combination transactions that are recorded in the parent company that were previously allocated to the respective segments are now allocated to the segment "Others"; and (ii) eliminations between different segments are now classified in the "elimination" column instead of being presented in each segment. For comparison purposes, the segment information disclosed for 2017 has been restated using the same criteria. The 2016 related segment information has not been restated, as the effects are immaterial.

The presentation of the operating segments includes items directly attributable to them, as well as any allocations required, including intangible assets, further details see note 29.

2.6 Information on equity interests

The Company's equity interests in direct and indirect subsidiaries and joint ventures are described in note 1. Except for (i) the companies ENERCAN, BAESA, Chapecoense and EPASA, which use the equity method of accounting, and (ii) the investment stated at cost by the subsidiary Paulista Lajeado in Investco S.A., all other entities are fully consolidated.

At December 31, 2018 and 2017, the noncontrolling interests recognized in the financial statements refer to the interests held by third parties in subsidiaries CERAN, Paulista Lajeado and CPFL Renováveis.

(3) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies used in preparing the Group's financial statements are set out below. These policies have been consistently applied to all reporting periods, except for the new accounting standards and interpretations adopted by the Group on January 1, 2018 described in note 3.17.

Due to the transition methods chosen by the Group in the application of certain new accounting standards, the comparative information of these financial statements has not been restated and the cumulative effects of the initial application on January 1, 2018 were recognized directly in Retained Earnings.

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3.1 Cash and cash equivalents

In the statements of cash flows, cash and cash equivalents include negative balances of overdraft accounts that are immediately payable and are an integral part of the Group's cash management.

Cash and cash equivalents comprise the balances of cash and financial investments with original maturities of three months or less from the contract date, which are subject to an insignificant risk of change in fair value at the settlement date and are used by the Group in the management of short-term obligations.

3.2 Concession agreements

Distribution companies

The IFRIC 12 – Service Concession Arrangements establish general guidelines for the recognition and measurement of obligations and rights related to concession agreements and apply to situations in which the granting authority controls or regulates which services the concessionaire should provide with the infrastructure, to whom the services should be provided and at what price, and controls any significant residual interest in the infrastructure at the end of the concession period.

When these criteria are met, the infrastructure of distribution concessionaires is segregated at the time of construction in accordance with the IFRS requirements, so that the following are recognized in the financial statements (i) an intangible asset corresponding to the right to operate the concession and collect from the users of public utilities, and (ii) a financial asset corresponding to the unconditional contractual right to receive cash (indemnity) by transferring control of the assets at the end of the concession.

The concession financial asset of distribution companies is measured based on its fair value, determined in accordance with the remuneration base for the concession assets, pursuant to the legislation in force established by the Brazilian Electricity Regulatory Agency (Agência Nacional de Energia Elétrica - ANEEL), and takes into consideration changes in the fair value, mainly based on factors such as new replacement value, and adjustment for Extended Comprehensive Consumer Price Index ("IPCA") for the distribution subsidiaries. The financial asset of distribution companies is classified as fair value through profit or loss, with the corresponding fair value changes entry in the Net Operating Revenue in the statement of profit or loss for the year (notes 4 and 25).

The remaining amount is recognized as intangible asset and relates to the right to charge consumers for electric energy distribution services, and is amortized in accordance with the consumption pattern that reflects the estimated economic benefit to the end of the concession.

Considering that (i) the tariff model that does not provide for a profit margin for the infrastructure construction services from distribution, (ii) the way in which the subsidiaries manage the constructions by using a high level of outsourcing, and (iii) the fact that there is no provision for profit margin on construction in the Group's business plans, Management is of the opinion that the margins on this operation are irrelevant, and therefore no mark-up to the cost is considered in revenue. The construction revenue and costs are therefore presented in the statement of profit or loss for the year in the same amounts.

Transmission companies:

The Group's transmission companies are responsible for constructing and operating the transmission infrastructure (two distinct performance obligations) in order to carry the energy from the generation centers

to the distribution points, according to their concession arrangements.

The energy transmission company has the obligation to maintain its transmission infrastructure available to its users to guarantee the receipt of the Permitted Annual Revenue (RAP) during the concession agreement term. These receipts represent the consideration for the construction and operation of the transmission infrastructure. Potential unamortized investments generate the right to indemnity at the end of the concession arrangement

Until December 31, 2017, the transmission infrastructure was classified as a financial asset under IFRIC 12 and measured at amortized cost. With the adoption IFRS 15 on January 1, 2018, the right to consideration for goods and services conditioned to the satisfaction of the performance obligations and not only to the passage of time places the transmission companies within the scope of this standard. Therefore, the considerations are now classified as a "Contract Asset".

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3.3 Financial instruments

Policy applicable from January 1, 2018

- Financial assets

Financial assets are recognized initially on the date that they are originated or on the trade date at which the Company or its subsidiaries become parties to the contractual provisions of the instrument. Derecognition of a financial asset occurs when the contractual rights to the cash flows from the asset expire or when the risks and rewards of ownership of the financial asset are transferred.

Subsequent measurement and gains and losses: Policy applicable from January 1, 2018

Financial assets measured at fair value through profit or loss (FVTPL)	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.
Financial assets at amortized cost	These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.
Debt instruments at fair value through other comprehensive income (FVOCI)	These assets are subsequently measured at fair value. Net gains and losses are recognized in other comprehensive income, except for interest income calculated using the effective interest method, foreign exchange gains and losses and impairment, which are recognized in profit or loss. On derecognition, gains and losses accumulated in other comprehensive income are reclassified to profit or loss.
Equity instrument at fair value through other comprehensive income.	These assets are subsequently measured at fair value. All gains and losses are recognized in other comprehensive income and are never reclassified to profit or loss, except dividends which are recognized as income in profit or loss (unless the dividend clearly represents a recovery of part of the cost of the investment).

Subsequent measurement and gain and loss: Policy applicable before January 1, 2018

Financial assets measured at fair value through profit or loss (FVTPL)	These assets are subsequently measured at fair value. Net gains or losses, including interest or dividend income, are recognized in profit or loss.
Held-to maturity financial assets	These assets are measured at amortized cost using the effective interest method.
Loans and receivables	These assets are measured at amortized cost using the effective interest method.
Available-for-sale financial assets	

These assets are measured at fair value and changes therein, other than

impairment losses, interest income and foreign currency differences on debt instruments, were

recognized in Other Comprehensive Income and accumulated in the fair value reserve. When these

assets were derecognized, the gain or loss accumulated in equity

was reclassified to profit or loss.

The rights of indemnity at the end of the concession term of the distribution subsidiaries are classified as measured at fair value through profit or loss and any effects on fair value of this asset are recognized in profit or loss.

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

Amortized Cost: A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Fair Value through Other Comprehensive Income (FVOCI): A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows, as the selling of financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in Other Comprehensive Income. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortized cost or FVOCI as described above are measured at FVTPL. This includes all derivative financial assets (see Note 33). On initial recognition, the Group may irrevocably designate a non-derivative financial asset that otherwise meets the requirements to be measured at amortized cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Business model assessment:

The Group makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes the stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether:

- management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realizing cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the Group's management;

- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- how managers of the business are compensated – e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; and
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Group's continuing recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL.

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Assessment whether contractual cash flows are solely payments of principal and interest:

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Group considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- prepayment and extension features; and
- terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse features).

For transactions involving the purchase and sale of energy conducted by the trading subsidiaries, the Group keeps an accounting policy defined in accordance to its business strategy with instruments measured at amortized cost, which refer to contracts already signed and still held with the purpose of receipt or delivery of energy according to the expected requirements by the Company related to purchase or sale. The transactions are generally long-term and are never settled by the net cash amount or another financial instrument and, even if some contract has a certain flexibility, the strategy of the Group's portfolio is not changed for this reason.

- Financial liabilities

Financial liabilities are initially recognized on the date that they are originated or on the trade date at which the Company or its subsidiaries become a party to the contractual provisions of the instrument. The classification of financial liabilities are as follows:

- i. Measured at fair value through profit or loss: these are financial liabilities that are: (i) designated at fair value in order to match the effects of recognition of income and expenses to obtain more relevant and consistent accounting information, or (ii) derivatives. These liabilities are measured at fair value, which changes are recognized in profit or loss and any subsequent change in their fair value attributable to credit risk in liabilities is subsequently recognized in comprehensive income.
- ii. Measured at amortized cost: these are other financial liabilities not classified into the previous category. They are measured initially at fair value net of any cost attributable to the transaction and subsequently measured at amortized cost using the effective interest rate method.

The Group recognizes financial guarantees when these are granted to non-controlled entities or when the financial guarantee is granted at a percentage higher than the Company's interest to cover commitments of joint ventures. Such financial guarantees are initially measured at fair value, by recognizing (i) a liability corresponding to the risk of non-payment of the debt, which is amortized against finance income simultaneously and in proportion to amortization of the debt, and (ii) an asset equivalent to the right to

compensation by the guaranteed party or a prepaid expense under the guarantees, which is amortized by receipt of cash from other shareholders or at the effective interest rate over the term of the guarantee. After initial recognition, guarantees are measured periodically at the higher of the amount determined in accordance with IAS 37 and the amount initially recognized less accumulated amortization.

Financial assets and liabilities are offset and presented at their net amount when, and only when, there is a legal right to offset the amounts and the intent to realize the asset and settle the liability simultaneously.

The classifications of financial instruments (assets and liabilities) are described in note 33.

- Issued Capital

Common shares are classified as equity. Additional costs directly attributable to share issues and share options are recognized as a deduction from equity, net of any tax effects.

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3.4 Property, plant and equipment

Items of property, plant and equipment are measured at acquisition, construction or formation cost less accumulated depreciation and, if applicable, accumulated impairment losses. Cost also includes any other costs attributable to bringing the assets to the place and in a condition to operate as intended by Management, the cost of dismantling and restoring the site on which they are located and capitalized borrowing costs on qualifying assets.

The replacement cost of items of property, plant and equipment is recognized if it is probable that it will involve economic benefits for the subsidiaries and if the cost can be reliably measured, and the value of the replaced item is written off. Maintenance costs are recognized in profit or loss as they are incurred.

Depreciation is calculated on a straight-line basis, at annual rates of 2% to 20%, taking into consideration the estimated useful life of the assets, as instructed and defined by the granting authority.

Gains and losses on disposal/ write-off of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the residual value of the asset, and are recognized net within other operating income/expenses.

Assets and facilities used in the electric generation, transmission and distribution activities are tied to these services and may not be removed, donated, disposed of, assigned or pledged in mortgage without the prior and express authorization of ANEEL. ANEEL, through Resolution No. 20 of February 3, 1999, amended by Normative Resolution No. 691 of December 8, 2015, releases Public Electric Energy Utility concessionaires from prior authorization for release of assets of no use to the concession, but determines that the proceeds from the disposal be deposited in a restricted bank account for use in the acquisition of new assets related to electric energy services.

3.5 Intangible assets and contract assets in progress

Includes rights related to non-physical assets such as goodwill and concession exploration rights, software and rights-of-way.

Goodwill that arises on the acquisition of subsidiaries is measured based on the difference between the fair value of the consideration transferred for acquisition of a business, adding the portion of noncontrolling interests, and the net fair value of the assets and liabilities of the subsidiary acquired.

Goodwill is subsequently measured at cost less accumulated impairment losses. Goodwill and other intangible assets with indefinite useful lives, if any, are not subject to amortization and are tested annually for impairment.

A bargain purchase is recognized as a gain in the statement of profit or loss in the year of the business acquisition.

Intangible assets corresponding to the right to operate concessions may have three origins, as follows:

i.

Acquisitions through business combinations: the portion arising from business combinations that corresponds to the right to operate the concession amortized over the remaining period of the concessions, on a straight-line basis;

- ii. Investments in infrastructure in service (application of IFRIC 12 - Concession Agreements): under the electric energy distribution concession agreements with the subsidiaries, the recognized intangible asset corresponds to the concessionaires' right to charge the consumers for use of the concession infrastructure. Since the exploration term is defined in the agreement, intangible assets with defined useful lives are amortized over the concession period in proportion to a curve that reflects the consumption pattern in relation to the expected economic benefits. For further information see note 3.2.

Items comprised in the infrastructure are directly tied to the Group's electric energy distribution operation and shall comply with the same regulatory rules described in item 3.4.

- iii. Use of Public Asset: upon certain generation concessions were granted with the condition of payments to the federal government for Use of Public Asset. The company recorded this obligation at present value, on the signing date, and the corresponding intangible assets. This intangible assets balance, comprising the interests capitalized until the operation starting date, is being amortized on a straight-line basis over the period of each concession.

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From January 1, 2018, the concession infrastructure assets of the distribution companies must be classified as contract assets during the construction or improvement period in accordance with the criteria of IFRS 15.

3.6 Impairment

Policy applicable from January 1, 2018

- Financial assets

IFRS 9 replaces the 'incurred loss' model in IAS 39 with an 'expected credit loss' (ECL) model.

The Group assesses evidence of impairment for certain receivables at both an individual and a collective level. Receivables that are not individually significant are collectively assessed for impairment. Collective assessment is carried out by grouping together assets with similar risk characteristics.

The Group recognizes loss allowances for ECLs on: (i) financial assets measured at amortized cost; (ii) debt investments measured at FVOCI, when applicable; and (iii) contract assets.

The Group measures loss allowances, using the simplified recognition approach, at an amount equal to lifetime ECLs, except for debt securities that are determined to have low credit risk at the reporting date, which are measured at 12-month ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

The Group considers a financial asset to be in default when the borrower has not complied with its contractual payment obligations and is unlikely to pay its obligations.

The Group uses an allowance matrix based on its historical default rates observed along the expected lifetime of the trade receivables to estimate the expected credit losses for the lifetime of the asset where the history of losses is adjusted to consider the effects of the current conditions and its forecasts of future conditions that did not affect the period in which the historical data were based.

The methodology developed by the Group resulted in a percentage of expected loss for bills of consumers, concessionaires and licensees that is in compliance with IFRS 9 described as expected credit losses, comprising in a single percentage the probability of loss weighted by the expected loss and possible results, that is, comprising the Probability of Default ("PD"), Exposure At Default ("EAD") and Loss Given Default ("LGD").

At each reporting date, the Group assesses whether financial assets carried at amortized cost and debt securities at FVOCI, when applicable, are credit-impaired. A financial asset is 'credit impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contractual clauses;
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganization; or
- the disappearance of an active market for a security because of financial difficulties.

Impairment losses related to consumers, concessionaires and licensees recognized in financial assets and other receivables, including contract assets, are recognized in profit or loss.

- Non-financial assets

Non-financial assets that have indefinite useful lives, such as goodwill, are tested annually for impairment to assess whether the asset's carrying amount does not exceed its recoverable amount. Other assets subject to amortization are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may be impaired.

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An impairment loss is recognized if the carrying amount of an asset exceeds its estimated recoverable amount, which is the greater of (i) its fair value less costs to sell and (ii) its value in use.

The assets (*e.g.* goodwill, concession intangible asset) are segregated and grouped together at the lowest level that generates identifiable cash flows (the "cash generating unit", or "CGU"). If there is an indication of impairment, the loss is recognized in profit or loss. Except in the case of goodwill impairment, which cannot be reversed in the subsequent period, impairment losses are reassessed annually for triggering events that would lead to possibility of reversals.

3.7 Provisions

A provision is recognized if, as a result of a past event, there is a legal or constructive obligation that can be estimated reliably, and it is probable (more likely than not) that an outflow of economic benefits will be required to settle the obligation. When applicable, provisions are determined by discounting the expected future cash outflows at a rate that reflects current market assessment and the risks specific to the liability.

3.8 Employee benefits

Certain subsidiaries have post-employment benefits and pension plans and are regarded as Sponsors of these plans. Although the plans have particularities, they have the following characteristics:

- i. Defined contribution plan: a post-employment benefit plan under which the Sponsor pays fixed contributions into a separate entity and will have no liability for the actuarial deficits of the plan. The obligations are recognized as an expense in the statement of profit or loss in the periods during which the services are rendered.
- ii. Defined benefit plan: The net obligation is calculated as the difference between the present value of the actuarial obligation based on assumptions, biometric studies and interest rates in line with market rates, and the fair value of the plan assets as of the reporting date. The actuarial liability is calculated annually by independent actuaries, under the responsibility of Management, using the projected unit credit method. Actuarial gains and losses are recognized in other comprehensive income when they occur. Net Interest (income or expense) is calculated by applying the discount rate at the beginning of the period to the net amount of the defined benefit asset or liability. When applicable, the cost of past services is recognized immediately in profit or loss.

If the plan records a surplus and it becomes necessary to recognize an asset, the recognition is limited to the present value of future economic benefits available in the form of reimbursements or future reductions in contributions to the plan.

3.9 Dividends and Interest on capital

Under Brazilian law, the Company is required to distribute a mandatory minimum annual dividend of 25% of profit adjusted in accordance with the Company's bylaws. A provision may only be made for the minimum mandatory dividend, and dividends declared but not yet approved are only recognized as a liability in the financial statements after approval by the competent body. According to Law 6,404/76, they will therefore be held in equity, in the "additional dividend proposed" account, as they do not meet the present obligation

criteria at the reporting date.

As established in the Company's bylaws and in accordance with current corporate law, the Board of Directors is responsible for declaring an interim dividend and interest on capital determined in a half-yearly statement of income. An interim dividend and interest on capital declared at the base date of June 30 is only recognized as a liability in the Company's financial statement after the date of the Board of Directors' decision.

Interest on capital is treated in the same way as dividends and is also stated in changes in equity. The withholding income tax on interest on capital is always recognized as a charge to equity with a balancing item in liabilities upon the proposal for its payment, even if not yet approved, since it meets the criterion of obligation at the time of Management's proposal.

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3.10 Revenue recognition

Policy applicable from January 1, 2018

The operating revenue in the normal course of the subsidiaries' activities is measured at the consideration received or receivable. The operating revenue is recognized when it represents the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services.

IFRS 15 establishes a revenue recognition model that considers five steps: (i) identify the contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation.

Thus, revenue is recognized only when (or if) the performance obligation is satisfied, that is, when the "control" of the goods or services of a certain transaction is actually transferred to the customer.

The revenue from electric energy distribution is recognized when the energy is supplied. The energy distribution subsidiaries perform the reading of the consumption of their customers based on a reading routine (calendar and reading route) and invoice monthly the consumption of MWh based on the reading performed for each consumer. As a result, part of the energy distributed during the month is not billed at the end of the month and, consequently, an estimate is developed by Management and recorded as "Unbilled". This unbilled revenue estimate is calculated using as a base the total volume of energy of each distributor made available in the month and the annualized rate of technical and commercial losses.

The revenue from energy generation sales is recognized based on the assured energy and at tariffs specified in the terms of the supply contracts or the current market price, as appropriate.

The revenue from energy trading is recognized based on bilateral contracts with market agents and properly registered with the Electric Energy Trading Chamber – CCEE.

The revenue from services provided is recognized when the service is provided, under a service agreement between the parties.

The revenue from construction contracts is recognized based on the reach of the performance obligation over time, considering the fulfillment of one of the following criteria:

- (a) the customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs;
- (b) the entity's performance creates or enhances an asset (for example, work in progress) that the customer controls as the asset is created or enhanced;
- (c) the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

The provision of infrastructure construction services is recognized in accordance with IFRS 15, against a contract asset.

The revenues of the transmission companies, recognized as operating revenue, are:

- Construction revenue: Refers to the services of construction of electric energy transmission facilities. These are recognized according to the percentage of completion of the construction works.
- Financing component: Refers to the interest recognized under the accrual basis on the amount receivable from the construction revenue.
- Revenue from operation and maintenance: Refers to the services of operation and maintenance of electric energy transmission facilities aimed at non-interruption of availability of these facilities, recognized based on incurred costs.

No single consumer accounts for 10% or more of the Group's total revenue.

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3.11 Income tax and social contribution

Income tax and social contribution expenses are calculated and recognized in accordance with the legislation in force and comprise current and deferred taxes. Income tax and social contribution are recognized in the statement of profit or loss except to the extent that they relate to items recognized directly in equity or other comprehensive income, when the net amounts of these tax effects are already recognized, and those arising from the initial recognition in business combinations.

Current taxes are the expected taxes payable or receivable/recoverable on the taxable profit or loss. Deferred taxes are recognized for temporary differences between the carrying amounts of assets and liabilities for accounting purposes and the equivalent amounts used for tax purposes and for tax loss carryforwards.

The Company and certain subsidiaries recognize in their financial statements the effects of tax loss carryforwards and deductible temporary differences, based on projections of future taxable profits, approved annually by the Boards of Directors and examined by the Fiscal Council. The subsidiaries also recognized tax credits relating to the tax benefits created by the corporate restructuring, which are amortized on a straight line basis for the remaining period of each concession agreement.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity.

Deferred income tax and social contribution assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related taxes benefit will be realized.

3.12 Earnings per share

Basic earnings per share are calculated by dividing the profit or loss for the year attributable to the Group's controlling shareholders by the weighted average number of shares outstanding during the year. Diluted earnings per share are calculated by dividing the profit or loss for the year attributable to the controlling shareholders, adjusted by the effects of instruments that potentially would have impacted the profit or loss for the year by the weighted average of the number of shares outstanding, adjusted by the effects of all dilutive potential convertible notes for the reporting periods, in accordance with IAS 33.

3.13 Government grants – CDE (Energy Development Account)

Government grants are only recognized when it is reasonably certain that these amounts will be received by the Group. They are recognized in profit or loss for the periods in which the Group recognizes as income the discounts granted in relation to the low-income subsidy and other tariff discounts.

The subsidies received through funds from the CDE (note 25) have the main purpose of offsetting discounts granted in order to provide immediate financial support to the distribution companies, in accordance with IAS 20.

3.14 Sector financial asset and liability

According to the tariff pricing mechanism applicable to distribution companies, the energy tariffs should be set at a price level (price cap) that ensures the economic and financial equilibrium of the concession, therefore, the concessionaires and licensees are authorized to charge their consumers (after review and

ratification by ANEEL) for: (i) the annual tariff increase; and (ii) every four or five years, according to each concession agreement, the periodic review for purposes of reconciliation of part of Parcel B (controllable costs) and adjustment of Parcel A (non-controllable costs).

The distributors' revenue is mainly comprised of the sale of electric energy and for the delivery (transport) of the electric energy via the distribution infrastructure (network). The distribution concessionaires' revenue is affected by the volume of energy delivered and the tariff. The electric energy tariff is comprised of two parcels which reflect a breakdown of the revenue:

- Parcel A (non-controllable costs): this parcel should be neutral in relation to the entity's performance, *i.e.*, the costs incurred by the distributors, classifiable as "Parcel A", are fully passed through the consumer or borne by the granting authority ; and
- Parcel B (controllable costs) – comprised of capital expenditure on investments in infrastructure, operational costs and maintenance and remuneration to the providers of capital. It is this parcel that

actually affects the entity's performance, since it has no guarantee of tariff neutrality and thus involves an intrinsic business risk.

This tariff pricing mechanism can cause temporary differences arising from the difference between the budgeted costs (Parcel A and other financial components) included in the tariff at the beginning of the tariff period and those actually incurred while it is in effect. This difference constitutes a right of the concessionaire to receive cash when the budgeted costs included in the tariff are lower than those actually incurred, or an obligation to pay if the budgeted costs are higher than those actually incurred.

3.15 Business combination

Business combinations are accounted for by applying the acquisition method. The consideration transferred in a business combination is measured at fair value, calculated as the sum of the fair values of the assets transferred by the acquirer, the liabilities incurred and the equity interests issued by the Company and subsidiaries in exchange for control of the acquiree. Costs related to the acquisition are recognized in profit or loss, when incurred.

At the acquisition date, assets and liabilities are recognized at fair value, except for: (i) deferred taxes, (ii) employee benefits and (iii) share-based payments.

The noncontrolling interests are initially measured either at fair value or at the noncontrolling interests' proportionate share of the acquiree's identifiable net assets. The measurement method is chosen on a transaction-by-transaction basis.

The excess of the consideration transferred, added to the portion of noncontrolling interests, over the fair value of the identifiable assets (including the concession intangible asset) and net liabilities assumed at the acquisition date are recognized as goodwill. In the event that the fair value of the identifiable assets and net liabilities assumed exceeds the consideration transferred, a bargain purchase is identified and the gain is recognized in the statement of profit or loss at the acquisition date.

3.16 Basis of consolidation

(i) Business combinations

The Company measures goodwill as the fair value of the consideration transferred including the recognized amount of any noncontrolling interest in the acquiree, less the recognized fair value of the identifiable assets acquired and liabilities assumed, all measured at the acquisition date.

(ii) Subsidiaries and joint ventures

The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. Joint ventures are accounted for using the equity method of accounting from the moment joint control is established.

The accounting policies of subsidiaries and joint ventures taken into consideration for purposes of consolidation and/or equity method of accounting, as applicable, are aligned with the Group's accounting policies.

The consolidated financial statements include the balances and transactions of the Company and its subsidiaries. The balances and transactions of assets, liabilities, income and expenses have been fully consolidated for the subsidiaries.

Intragroup balances and transactions, and any income and expenses derived from these transactions, are eliminated in preparing the consolidated financial statements. Unrealized gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Company's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

In the case of subsidiaries, the portion related to noncontrolling interests is stated in equity and in the statements of profit or loss and comprehensive income in each period presented.

The balances of joint ventures, as well as the Company's interest in each of them are described in note 12.2.

(iii) Acquisition of noncontrolling interests

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Accounted for as transaction among shareholders. Consequently, no asset or goodwill is recognized as a result of such transaction.

3.17 New standards and interpretations issued and effective

A number of IASB standards were issued or revised and are mandatory for accounting periods beginning on January 1, 2018:

a) IFRS 9 - Financial instruments

Effective for the financial statements of an entity prepared in accordance with IFRS for annual periods beginning on or after January 1, 2018, IFRS 9 standard establishes new requirements for classification and measurement of financial assets and liabilities. Financial assets become classified into three categories based on the business model within which they are held and the characteristics of their contractual cash flows: (i) measured at fair value through profit or loss; (ii) measured at amortized cost; and (iii) measured at fair value through other comprehensive income.

With regard to financial liabilities, the main alteration in relation to the requirements set by IAS 39 requires any change in fair value of a financial liability designated at fair value through profit or loss attributable to changes in the liability's credit risk to be stated in other comprehensive income and not in the statement of profit or loss.

In relation to the impairment of financial assets, IFRS 9 requires an expected credit loss model, instead to an incurred credit loss under IAS 39. The expected credit loss model requires an entity to account for expected credit losses and changes in those expected credit losses at each reporting date to reflect changes in credit risk since initial recognition. In other words, it is no longer necessary for a default event to have occurred before credit losses are recognized.

Regarding the modifications related to hedge accounting, IFRS 9 retains three types of hedge accounting mechanisms currently available in IAS 39. Under IFRS 9, greater flexibility has been introduced to the types of risks components of non-financial items that are eligible for hedge accounting. There was an increase in the types of transactions that qualify as hedging instrument and the types of risk components of non-financial items eligible for hedge accounting. In addition, the effectiveness test has been overhauled and replaced with the principle of an "economic relationship". Retrospective assessment of hedge effectiveness is also no longer required. Enhanced disclosure requirements about an entity's risk management have also been introduced.

The Group's distribution subsidiaries have material assets recognized in concession financial asset line, previously classified as "available-for-sale", in accordance with the requirements of IAS 39. These assets represent the right to indemnity at the end of the concession period of the distribution subsidiaries. The designation of these instruments as available-for-sale occurred due to the non-classification in the other three categories described in IAS 39 (loans and receivables, fair value through profit or loss and held-to-maturity). These assets has been classified as measured at fair value through profit or loss according to the new standard (IFRS 9), and the effects of the subsequent remeasurement have been

recognized in profit or loss for the year. As of December 31, 2018, the amount registered related to this assets was R\$ 7,430,149 (R\$ 6,569,404 as of December 31, 2017) and there were no material impacts related to the initial recognition due to the change of classification criteria of financial assets, required by IFRS 9.

The sector financial assets recorded in the Group's distribution companies related to the tariff definition mechanism, in respect of the timing differences between the budgeted costs and those that are actually incurred, were previously recorded as "loans and receivables" in accordance with the requirements of IAS 39. After the application of IFRS 9, these financial assets are classified as amortized cost. As of December 31, 2018, the recorded amount for these assets was R\$ 1,554,861 (R\$ 565,837 as of December 31, 2017) and there were no impacts on measurement of the balances as a result of the change in classification.

Accordingly, there was no significant measurement impact on the Group's consolidated financial statements due to the initial adoption related to the classification of financial assets.

Moreover, as the Group do not apply hedge accounting, Management concluded that there were no material impact on the information disclosed or amounts recorded in its consolidated financial statements as a result of the amendments to standard.

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As regards the changes in the calculation of impairment of financial instruments, the accumulated effects of the initial adoption were recognized retrospectively on January 1, 2018, representing a reduction of R\$73,426 (R\$48,461 net of tax effects) from the "consumers, concessionaires and permit holders" line item.

Considering the changes in credit risk, the financial liabilities, which were designated at fair value through profit or loss up to the 2017 statements, generated impacts on the entries about changes in credit risk in other comprehensive income, instead of directly in the income statement for the year. The accumulated effects of the initial adoption were recognized retrospectively on January 1, 2018, amounting to a loss of R\$ 51,736 (R\$ 34,146 net of tax effects) in retained earnings, which the counterpart was the account of other comprehensive income.

b) IFRS 15 - Revenue from contracts with customers

IFRS 15 provides a model for accounting for contracts with customers and it superseded the prior guide for revenue recognition provided in IAS 18 – Revenue and IAS 11 - Construction contracts and related interpretations.

The standard establishes that an entity will recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard introduces a five-stage model for revenue recognition: (i) identify the contract with the customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract and (v) recognize revenue when (or as) the entity satisfies a performance obligation.

Under IFRS 15, an entity recognizes revenue when (or as) the entity satisfies a performance obligation, *i.e.*, when the "control" over the goods and services in a certain operation is transferred to the customer, and will establish a greater level of detail in the disclosures.

Beginning January 1, 2018, the Group's management assessed the effects on its consolidated financial statements, comprising the new model of five stages mentioned above, and the compensation for non-compliance with technical indicators is considered as a variable consideration under step (iii) above, and it is now recognized as operating revenue, in line item Other Income, whereas until December 31, 2017 it was recognized in Other Operating Expenses. The amount recognized in 2018 was R\$ 57,630 (note 25).

The distribution companies have infrastructure concession assets during the construction period, previously recorded as "intangible assets". These assets are now recorded as "contract asset in progress" according to IFRS 15 requirements. This change had no material impacts on consolidated financial statements (see note 3.5 – Intangible assets and Contract asset in progress).

In addition, the transmission subsidiaries had assets previously classified as financial assets, "loans and receivables", according to the requirements of IAS 39, comprising two components: the right to receive the "Permitted Annual Revenue– RAP" to be received over the concession period and the indemnity at the end of the concession. These two components are now classified as contract asset, according to the

requirements of IFRS 15. This change did not have material impacts on the Group's consolidated financial statements. (see note 3.2 – transmission subsidiaries).

c) IFRIC 22 – Foreign currency transactions and advance consideration

Issued on December 8, 2016, IFRIC 22 addresses the exchange rate to be used in transactions that involve the consideration paid or received in advance in foreign currency transactions, IFRIC will be effective for annual periods beginning on or after January 1, 2018.

The Group's foreign currency transactions are currently restricted to debt instruments with international financial institutions, measured at fair value, and to the purchase of electricity from Itaipu. As assets and liabilities measured at fair value are outside the scope of this interpretation and there are no advance payments on operations with Itaipu, Management believes that IFRIC 22 will not have material impacts on its consolidated financial statements.

3.18 New standards and interpretations not yet effective and not adopted in advance

A number of new standards and amendments to standards and IFRS interpretations were issued by the IASB and are not yet effective for the year ended December 31, 2018. The Group has not adopted these changes in the preparation of these financial statements:

a) IFRS 16 – Leases

Among the standards that are still not valid, the Group evaluated the potential effect of the adoption of IFRS 16 and expects an immaterial impact in the consolidated financial statements.

Issued on January 13, 2016, establishes, in the lessee's view, a new form for accounting for leases currently classified as operating leases, which are now recognized similarly to leases classified as finance leases. As regards the lessors, it virtually retains the requirements of IAS 17, including only some additional disclosure aspects.

IFRS 16 introduces a single, on balance sheet lease accounting model for lessees. A lessee recognizes a right of use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for short term leases and leases of low value items. Lessor accounting remains similar to the current standard – i.e. lessors continue to classify leases as finance or operating leases.

IFRS 16 replaces existing leases guidance, including IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC 15 Operating Leases – Incentives and SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

IFRS 16 will be effective for annual reporting periods beginning on or after January 1, 2019. The Group has assessed the pronouncement and expects that its adoption would not cause material impacts on these financial statements.

b) IFRIC 23 - Uncertainty over Tax Treatments

Issued in May 2017 in order to clarify the accounting for tax positions that may not be accepted by the tax authorities in regard to IRPJ and CSLL matters. In general lines, the main point of analysis of the interpretation refers to the probability of acceptance by the tax authorities of the tax treatment chosen by the Group.

IFRS 23 / IFRIC 22 will be effective for annual reporting periods beginning on or after January 1, 2019. The Group has preliminarily assessed the interpretation and does not expect material impacts on the adoption of this interpretation.

c) Annual Improvements to IFRS / 2015 – 2017 Cycle

Annually IASB discusses and decides on the proposed improvements to IFRS, as they arise during the year. On December 12, 2017, measures related to the 2015-2017 cycle were published, beginning on January 1, 2019.

IFRS 3 Business Combinations and IFRS 11 Joint Ventures – clarify that when an entity obtains the control of a business that is a joint operation, it remeasures the previously held equity interests in that business. Regarding IFRS 11, it clarifies that when an entity obtains the joint control of a business that is a joint operation, the entity does not transfer the previously held equity interests in that business.

IAS 12 Income Taxes – clarifies the requirements regarding the effects of the recognition of the income tax on dividends related to transactions or events that generated profits to be distributed.

IAS 23 Borrowing Costs – clarifies that if any borrowing remains outstanding after the related asset is available for use or sale, such borrowing becomes part of the amounts that an entity borrows generally when calculating the capitalization rate on borrowings in general.

Based on a preliminary assessment, Management believes that the application of these amendments will not have a material impact on the disclosures and amounts recognized in its consolidated financial statements.

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(4) DETERMINATION OF FAIR VALUES

A number of the Group's accounting policies and disclosures require the determination of fair value, for both financial and non-financial assets and liabilities. Fair values have been determined for measurement and / or disclosure purposes based on the following methods. When applicable, further information on the assumptions used in determining fair values is disclosed in the notes specific to that asset or liability.

The Group measures fair value in accordance with IFRS 13, which defines fair value as the estimated price for an unforced transaction for the sale of the asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, under current market conditions.

- Property, plant and equipment and intangible assets

The fair value of property, plant and equipment and intangible assets recognized as a result of a business combination is based on market values. The fair market value of these assets is the estimated value for which an asset could be exchanged on the valuation date between knowledgeable interested parties in an unforced transaction between market participants at the measurement date. The fair value of items of property, plant and equipment is based on the market approach and cost approaches using quoted market prices for similar items when available and replacement cost when appropriate.

- Financial instruments

Financial instruments measured at fair values are valued based on quoted prices in an active market, or, if such prices were not available, assessed using pricing models, applied individually for each transaction, taking into consideration the future cash flows, based on the conditions contracted, discounted to present value at market interest rate curves, based on information obtained, when available, from the *B3 S.A. – Brasil, Bolsa, Balcão (“B3”)* and *Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais (“ANBIMA”)* (note 33) and also includes the debtor's credit rating.

The right to compensation, to be paid by the Federal Government, regarding the assets of the distribution concessionaires at the end of the concession agreement are recognized at fair value through profit and loss. The methodology adopted for marking these assets to fair value is based on the tariff review process for distributors. This review, conducted every four or five years according to each concessionaire, involves assessing the replacement price for the distribution infrastructure, in accordance with criteria established by the granting authority (“ANEEL”). This valuation basis is used for pricing the tariff, which is increased annually up to the next tariff review, based on the parameter of the main inflation indices.

Accordingly, at the time of the tariff review, each distribution concessionaire adjusts the position of the financial asset base for compensation at the amounts ratified by the granting authority and uses the IPCA as the best estimates for adjusting the original base to the updated value at subsequent dates, in accordance with the tariff review process.

(5) CASH AND CASH EQUIVALENTS

Dec 31, 2018 Dec 31, 2017

Bank balances	422,968	365,031
Short-term financial investments	1,468,489	2,884,611
Overnight investment (a)	66	178,444
Bank certificates of deposit (b)	462,551	785,074
Repurchase agreements secured on debentures (b)	177,050	3,268
Investment funds (c)	828,822	1,917,825
Total	1,891,457	3,249,642

(a) Current account balances, which earn daily interest by investment in repurchase agreements secured on Bank Certificate Deposit (CDB) and interest of 15% of the variation in the Interbank Certificate of Deposit (CDI).

(b) Short-term investments in Bank Certificates of Deposit (CDB) and repurchase agreements secured on debentures with major financial institutions that operate in the Brazilian financial market, with daily liquidity, short-term due, low credit risk and interest equivalent, on average, to 100.3% of the CDI.

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(c) Exclusive Fund investments, with daily liquidity and interest equivalent, on average, of 79% of the CDI, subject to floating rates tied to the CDI linked to their investments in federal government bonds, CDBs, financial bills and secured debentures of major financial institutions, with low credit risk and short-term due.

(6) CONSUMERS, CONCESSIONAIRES AND LICENSEES

The balance derives mainly from the supply of electric energy. The following table shows the breakdown at December 31, 2018 and 2017:

	Amounts coming due	Past due until 90 days	> 90 days	Dec 31, 2018	Total Dec 31, 2017
Current					
Consumer classes					
Residential	803,215	584,688	71,283	1,459,186	1,113,604
Industrial	327,266	84,260	68,658	480,184	483,630
Commercial	334,052	101,357	31,075	466,483	382,470
Rural	90,955	23,606	8,831	123,392	98,663
Public administration	77,064	19,651	2,336	99,051	88,910
Public lighting	59,769	9,906	8,192	77,868	67,533
Public utilities	102,258	14,531	5,051	121,840	100,843
Billed	1,794,579	837,999	195,426	2,828,004	2,335,653
Unbilled	1,158,106	-	-	1,158,106	1,008,486
Financing of consumers' debts	169,265	28,913	26,725	224,903	206,937
CCEE transactions	170,793	2,955	1,428	175,176	413,067
Concessionaires and licensees	421,571	-	6,790	428,361	539,322
Others	34,001	-	-	34,002	36,011
	3,748,315	869,867	230,369	4,848,552	4,539,476
Allowance for doubtful accounts				(300,601)	(238,193)
Total				4,547,951	4,301,283
Noncurrent					
Financing of consumers' debts	196,635	-	-	196,635	217,944
Free Energy	6,360	-	-	6,360	5,976
CCEE transactions	231,551	318,249	-	549,800	41,301
	434,546	318,249	-	752,795	265,221
Allowance for doubtful accounts				-	(28,683)
Total				752,795	236,539

Financing of Consumers' Debts - Refers to the negotiation of overdue receivables from consumers, principally public administration. Payment of some of these receivables is guaranteed by the debtors, by pledging the bank accounts through which their ICMS (VAT) tax is received.

Electric Energy Trading Chamber (CCEE) transactions - The amounts refer to the sale of electric energy on the spot market. The noncurrent amounts mainly comprise: (i) adjustments of entries made by

the CCEE in response to certain legal decisions (preliminary decisions) in the accounting processes for the period from September 2000 to December 2002; and (ii) provisional accounting entries established by the CCEE (iii) opening balances due to the CCEE temporary situation in function of injections from generating companies due to the hydrological scenario and its financial impacts over free market. The subsidiaries consider that there is no significant risk on the realization of these assets and consequently no allowance was recognized for these transactions.

Concessionaires and Licensees - Refer basically to receivables for the supply of electric energy to other concessionaires and licensees, mainly by the subsidiaries CPFL Geração, CPFL Brasil and CPFL Renováveis.

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Allowance for doubtful accounts

The allowance for doubtful accounts is recognized based on the expected credit loss (ECL), adopting the simplified method of recognizing, based on historical and future probability of default.

Movements in the allowance for doubtful accounts are shown below:

	Consumers, concessionaires and licensees	Other receivables (note 11)	Total
As of December 31, 2015	(159,194)	(14,441)	(173,634)
Business combination	(70,636)	(16,187)	(86,823)
Allowance - reversal (recognition)	(258,377)	(969)	(259,347)
Recovery of revenue	82,393	605	82,998
Write-off of accrued receivables	144,289	3,000	147,289
As of December 31, 2016	(261,525)	(27,992)	(289,517)
Allowance - reversal (recognition)	(263,668)	(1,439)	(265,107)
Recovery of revenue	110,008	-	110,008
Write-off of accrued receivables	148,309	52	148,361
As of December 31, 2017	(266,876)	(29,379)	(296,255)
Allowance - reversal (recognition)	(277,802)	1,419	(276,383)
Recovery of revenue	107,122	-	107,122
Effects on first adoption of IFRS 9	(72,687)	(738)	(73,426)
Write-off of accrued receivables	209,641	-	209,641
As of December 31, 2018	(300,601)	(28,698)	(329,299)
Current	(300,601)	(28,698)	(329,299)
Noncurrent	-	-	-

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(7) TAXES RECOVERABLE

	Dec 31, 2018	Dec 31, 2017
<u>Current</u>		
Prepayments of social contribution - CSLL	12,373	7,257
Prepayments of income tax - IRPJ	36,972	21,887
Income tax and social contribution to be offset	74,395	59,658
Income tax and social contribution recoverable	123,739	88,802
Withholding income tax - IRRF on interest on capital	8,163	43,841
Withholding income tax - IRRF	92,210	103,277
State VAT - ICMS to be offset	125,669	104,843
Social Integration Program - PIS	9,970	8,447
Contribution for Social Security Funding - COFINS	46,741	37,699
Others	4,764	8,137
Other taxes recoverable	287,517	306,244
Total current	411,256	395,045
<u>Noncurrent</u>		
Social contribution to be offset - CSLL	62,458	58,856
Income tax to be offset - IRPJ	5,508	2,608
Income tax and social contribution recoverable	67,966	61,464
State VAT - ICMS to be offset	174,596	159,624
Social Integration Program - PIS	1,060	1,024
Contribution for Social Security Funding - COFINS	4,885	4,719
Others	5,185	6,613
Other taxes recoverable	185,725	171,980
Total noncurrent	253,691	233,444

Withholding income tax - IRRF – Relates mainly to IRRF on financial investments.

Social contribution to be offset – CSLL – In noncurrent, it refers basically to the final unappealable favorable decision in a lawsuit filed by the subsidiary CPFL Paulista. The subsidiary CPFL Paulista is awaiting the authorization for utilization of credit from the Federal Revenue in order to carry out its subsequent offset.

State VAT - ICMS to be offset – In noncurrent, it refers mainly to the credit recorded on purchase of assets that results in the recognition of property, plant and equipment, intangible assets and financial assets.

(8) SECTOR FINANCIAL ASSETS AND LIABILITIES

The breakdown and changes for the year in the balances of Sector financial asset and liability is as follows:

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	As of December 31, 2017			Operating revenue		Finance income /expense	Receipt
	Deferred	Approved	Total	Constitution	Realization	Monetary adjustment	Tariff flag (note 25.4)
Parcel "A"	924,943	(235,916)	689,026	1,416,031	656	90,658	(297,300)
CVA (*)							
CDE (**)	(235,901)	(263,520)	(499,422)	352,202	358,731	(10,630)	
Electric energy cost	1,625,759	(18,280)	1,607,479	416,476	(599,527)	93,538	(297,300)
ESS and EER (***)	(974,091)	(167,048)	(1,141,139)	(686,829)	878,350	(63,412)	
Proinfra	(610)	(17,961)	(18,572)	8,456	13,411	80	
Basic network charges	(20,163)	23,387	3,224	69,335	(16,318)	3,540	
Pass-through from Itaipu	959,518	125,860	1,085,378	1,222,806	(781,341)	79,596	
Transmission from Itaipu	7,802	7,806	15,608	38,876	(11,909)	1,648	
Neutrality of industry charges	32,566	112,084	144,651	(81,435)	(110,305)	(2,044)	
Overcontracting	(469,937)	(38,244)	(508,181)	76,143	269,565	(11,657)	
Other financial components	(193,496)	21,812	(171,685)	(327,883)	119,112	(10,419)	
Total	731,447	(214,104)	517,341	1,088,148	119,768	80,240	(297,300)
Current assets			210,834				
Noncurrent assets			355,003				
Current liabilities			(40,111)				
Noncurrent liabilities			(8,385)				

	As of December 31, 2016			Operating revenue		Finance income/expense	Receipt	As of
	Deferred	Approved	Total	Constitution	Realization	Monetary adjustment	Tariff flag (note 25.4)	Deferred
Parcel "A"	(762,573)	190,369	(572,203)	1,187,928	536,269	(76,726)	(386,242)	924,943
CVA (*)								
CDE (**)	(342,161)	(70,301)	(412,462)	(405,409)	356,715	(38,267)	-	(235,901)
Electric energy cost	(506,490)	(239,777)	(746,267)	2,018,754	751,840	(31,144)	(385,704)	1,625,759
ESS and EER (***)	(406,568)	(124,411)	(530,979)	(1,003,482)	450,638	(57,165)	(151)	(974,091)

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Proinfra	3,492	31,414	34,906	(28,048)	(18,829)	(6,600)	-	(610)
Basic network charges	27,527	9,660	37,187	1,448	(35,035)	(376)	-	(20,163)
Pass-through from Itaipu	147,012	442,911	589,923	1,022,892	(570,453)	43,016	-	959,518
Transmission from Itaipu	7,646	7,281	14,927	13,992	(13,705)	394	-	7,802
Neutrality of industry charges	142,091	164,375	306,466	89,103	(258,685)	7,767	-	32,566
Overcontracting	164,878	(30,782)	134,096	(521,321)	(126,217)	5,648	(387)	(469,937)
Other financial components	(182,958)	(159,759)	(342,717)	(72,877)	249,516	(5,607)	-	(193,496)
Refunds related to judicial injunctions	(76,615)	(132,410)	(209,025)	(10,038)	190,291	805	-	-
Others	(106,343)	(27,349)	(133,692)	(62,839)	59,226	(6,412)	-	(193,496)
Total	(945,530)	30,612	(914,918)	1,115,051	785,786	(82,333)	(386,242)	731,447

Current assets -

Noncurrent assets -

Current liabilities (597,515)

Noncurrent liabilities (317,406)

(*) Deferred tariff costs and gains variations from Parcel "A" items

(**) Energy Development Account – CDE

(***) System Service Charge (ESS) and Reserve Energy Charge (EER)

a) CVA

Refers to the variations of the Parcel "A" account, in accordance with note 3.14. These amounts are adjusted based on the SELIC rate and are compensated in the subsequent tariff processes.

b) Neutrality of industry charges

Refers to the neutrality of the industry charges contained in the electric energy tariffs, calculating the monthly differences between the amounts billed relating to such charges and the respective amounts considered at the time the distributors' tariff was set.

c) Energy overcontracting

Electric energy distribution concessionaires are required to guarantee 100% of their energy market through contracts approved, registered and ratified by ANEEL. It is also assured to the distribution concessionaires

that costs or revenues derived from energy overcontracting will be passed through the tariffs, limited to 5% of the energy load requirement, as well as the costs related to electric energy deficits. These amounts are adjusted based on SELIC rate and are compensated in the subsequent tariff processes.

d) Other financial components

Refers mainly to: (i) excess demand and excess reactive power that, will be amortized upon the approval of the 5th periodic tariff review cycle; (ii) refund of the research and development - "R&D" related to the amount overpaid to the National Treasury in the period from 2010 to 2012 for the 0.30% surcharge on Net Operating Revenue - ROL; (iii) recalculations of the tariff processes and (iv) Tariff effect arising from the bilateral agreement between the parties signatories of the Power Trading Chamber in the Regulated Environment – CCEAR.

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(9) DEFERRED TAX ASSETS AND LIABILITIES**9.1 Breakdown of tax assets and liabilities**

	Dec 31, 2018	Dec 31, 2017
<u>Social contribution credit (debit)</u>		
Tax losses carryforwards	137,577	103,903
Tax benefit of merged intangible	97,288	105,065
Temporarily nondeductible/taxable differences	(292,257)	(305,677)
Subtotal	(57,392)	(96,708)
<u>Income tax credit (debit)</u>		
Tax losses carryforwards	382,359	303,543
Tax benefit of merged goodwill	315,189	342,262
Temporarily nondeductible/taxable differences	(809,917)	(844,948)
Subtotal	(112,369)	(199,141)
<u>PIS and COFINS credit (debit)</u>		
Temporarily nondeductible/taxable differences	(10,086)	(10,543)
Total	(179,847)	(306,392)
Total tax credit	956,380	943,199
Total tax debit	(1,136,227)	(1,249,591)

9.2 Tax benefit of merged intangible

Refers to the tax benefit calculated on the intangible derived from the acquisition of subsidiaries, as shown in the following table, which had been incorporated and is recognized in accordance with Instructions No. 319/99 and No. 349/01 issued by the Brazilian Securities and Exchange Commission ("CVM"). The benefit is realized proportionally to the tax amortization of the merged intangible that gave rise to it, during the remaining concessions period, as shown in note 14.

	December 31, 2018		December 31, 2017	
	Social contribution	Income tax	Social contribution	Income tax
CPFL Paulista	41,246	114,572	45,872	127,421
CPFL Piratininga	10,180	34,938	11,215	38,491
RGE	-	-	21,513	88,843
RGE Sul (RGE)	45,863	153,618	26,466	73,515
CPFL Geração	-	12,061	-	13,992
Total	97,288	315,189	105,065	342,262

9.3 Accumulated balances of temporarily nondeductible/nontaxable differences

	December 31, 2018		
	Social	Income	PIS/CO
	contribution	tax	
Temporarily nondeductible differences			
Provision for tax, civil and labor risks	57,635	160,096	
Private pension fund	2,913	8,093	
Allowance for doubtful debts	30,316	84,211	
Free energy supply	9,166	25,462	
Research and development and energy efficiency programs	27,506	76,405	
Personnel-related provisions	5,208	14,467	
Depreciation rate difference	4,764	13,235	
Derivatives	(58,698)	(163,051)	
Recognition of concession - adjustment of intangible asset (IFRS)	(6,399)	(17,775)	
Recognition of concession - adjustment of financial asset (IFRS)	(148,561)	(410,608)	(7)
Actuarial losses (IFRS)	26,001	72,223	
Financial instruments (IFRS)	(5,111)	(14,194)	
Others	(18,834)	(52,471)	(2)
Temporarily nondeductible differences - accumulated comprehensive income:			
Property, plant and equipment - adjustment of deemed cost (IFRS)	(48,806)	(135,572)	
Actuarial losses (IFRS)	58,071	161,307	
Temporarily nondeductible differences - Business combination - CPFL Renováveis			
Deferred taxes - asset:			
Provision for tax, civil and labor risks	11,620	32,277	
Fair value of property, plant and equipment (negative value added of assets)	19,817	55,047	
Deferred taxes - liability:			
Value added derived from determination of deemed cost	(24,690)	(68,584)	
Intangible asset - exploration right/authorization in indirect subsidiaries acquired	(227,199)	(631,106)	
Other temporary differences	(6,976)	(19,379)	
Total	(292,257)	(809,917)	(10)

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9.4 Reconciliation of the income tax and social contribution amounts recognized in the statements of income for the years ended December 31, 2018, 2017 and 2016:

	2018		2017		2016	
	Social contribution	Income tax	Social contribution	Income tax	Social contribution	Income tax
Profit before taxes	2,939,977	2,939,977	1,846,670	1,846,670	1,380,547	1,380,547
Reconciliation to reflect effective rate:						
Equity interest in associates and joint ventures	(334,198)	(334,198)	(312,390)	(312,390)	(311,414)	(311,414)
Amortization of intangible asset acquired	48,649	62,756	48,649	62,756	48,649	62,756
Effect of presumed profit regime	(242,700)	(289,923)	(198,554)	(237,739)	(175,110)	(234,827)
Adjustment of revenue from excess demand and excess reactive power	153,302	153,302	134,778	134,778	119,272	119,272
Tax incentive - operating profit	-	(52,336)	-	(71,340)	-	(112,232)
Other permanent additions (exclusions), net	101,581	87,162	74,015	82,631	6,420	(24,063)
Tax base	2,666,611	2,566,740	1,593,168	1,505,367	1,068,364	880,040
Statutory rate	9%	25%	9%	25%	9%	25%
Tax credit (debit)	(239,995)	(641,685)	(143,385)	(376,342)	(96,153)	(220,010)
Recognized (unrecognized) tax credit, net	26,323	81,375	(25,342)	(58,559)	(54,706)	(130,621)
Total	(213,673)	(560,310)	(168,727)	(434,901)	(150,859)	(350,631)
Current	(227,464)	(578,381)	(153,543)	(387,076)	(244,015)	(623,183)
Deferred	13,792	18,071	(15,185)	(47,825)	93,156	272,552

Amortization of intangible asset acquired – Refers to the permanent nondeductible portion of amortization of intangible assets derived from the acquisition of investees (note 14).

Recognized (unrecognized) tax assets, net – the recognized tax assets refer to the amount of tax assets on tax loss carryforwards recorded as a result of review of projections of future profits. The unrecognized tax assets refer to losses generated for which currently there is no reasonable assurance that sufficient future taxable profits will be generated to absorb them.

The deferred income tax and social contribution revenue recorded in the statement of profit or loss in the amount of R\$ 31,863 refers to (i) income tax and social contribution losses (revenue of R\$ 112,491); (ii) tax benefit of the merged intangible (expenses of R\$ 34,850) and (iii) temporary differences (expenses of R\$ 45,778).

9.5 Income tax and social contribution amounts recognized in equity

The deferred income tax and social contribution recognized directly in equity (other comprehensive income) in 2018, 2017 and 2016 were as follows:

	2018		2017		2016
	Social Contribution	Income tax	Social Contribution	Income tax	
Actuarial losses (gains)	313,243	313,243	(166,857)	(166,857)	(166,857)
Effects of asset ceiling	6,617	6,617	21,399	21,399	21,399
Basis of calculation	319,860	319,860	(145,458)	(145,458)	(145,458)
Statutory rate	9%	25%	9%	25%	25%
Calculated taxes	(28,787)	(79,965)	13,092	36,365	36,365
Limitation on recognition (reversal) of tax credits	7,325	20,347	-	-	-
Taxes recognized in other comprehensive income	(21,462)	(59,618)	13,092	36,365	36,365

9.6 Unrecognized deferred tax assets

As of December 31, 2018, the parent company has tax credits on tax loss carryforwards that were not recognized amounting to R\$ 82,573 since currently there is not probable that taxable profits will be available in the future. This amount can be recognized in the future, according to the annual reviews of taxable profit projections.

Some subsidiaries have also income tax and social contribution credits on tax loss carryforwards that were not recognized because currently there is no reasonable assurance that sufficient future taxable profits will be generated to absorb them. At December 31, 2018, the main subsidiaries that have such non-recognized income tax and social contribution credits are CPFL Renováveis (R\$ 794,240), RGE Sul (R\$ 127,449), Sul Geradora (R\$ 72,673), CPFL Telecom (R\$ 32,983) and CPFL Jaguari Geração (R\$ 2,473). These tax losses can be carried forward indefinitely.

(10) CONCESSION FINANCIAL ASSET

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	Distribution	Transmission	Consolidated
As of December 31, 2015	3,483,713	123,391	3,607,104
Current	-	9,630	9,630
Noncurrent	3,483,713	113,761	3,597,474
Additions	655,456	50,580	706,036
Adjustment of expected cash flow	203,452	-	203,452
Adjustment - financial asset measured at amortized cost	-	16,088	16,088
Cash inputs - RAP	-	(9,727)	(9,727)
Disposals	(25,392)	-	(25,392)
Business combination	876,281	-	876,281
As of December 31, 2016	5,193,511	180,333	5,373,844
Current	-	10,700	10,700
Noncurrent	5,193,511	169,633	5,363,144
Additions	972,254	46,261	1,018,515
Adjustment of expected cash flow	212,294	-	212,294
Adjustment - financial asset measured at amortized cost	-	27,807	27,807
Cash inputs - RAP	-	(15,677)	(15,677)
Disposals	(35,039)	-	(35,039)
Business combination	(12,338)	-	(12,338)
As of December 31, 2017	6,330,681	238,723	6,569,404
Current	-	23,736	23,736
Noncurrent	6,330,681	214,987	6,545,668
Additions	783,713	-	783,713
Adjustment of expected cash flow	362,073	-	362,073
Disposals	(46,318)	-	(46,318)
Adoption of IFRS 15 (note 3)	-	(238,723)	(238,723)
As of December 31, 2018	7,430,149	-	7,430,149
Current	-	-	-
Noncurrent	7,430,149	-	7,430,149

The amount refers to the financial asset corresponding to the right established in the concession agreements of the energy distributors to receive cash by compensation upon the return of the assets to the granting authority at the end of the concession, measured at fair value.

According to the current tariff model, the remuneration for this asset is recognized in profit or loss upon billing to consumers and the realization occurs upon receipt of the electric energy bills. Moreover, the difference to adjust the balance at fair value (new replacement value - "VNR" - note 4) is recognized as a balancing item to the operating income account (note 25) in the statement of profit or loss for the year (R\$362,073 as of December 31, 2018 and R\$212,294 as of December 31, 2017).

(11) OTHER ASSETS

	Current		Noncurrent	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Advances - FUNCESP	3,929	7,851	6,797	6,797
Advances to suppliers	4,031	31,981	-	-
Pledges, funds and restricted deposits	77,442	159,291	524,461	621,489
Orders in progress	142,708	158,707	6,844	5,062
Services rendered to third parties	9,281	8,530	-	-
Energy pre-purchase agreements	-	-	25,390	26,260
Prepaid expenses	172,155	80,600	6,367	20,043
GSF Insurance Premium	13,701	19,629	5,782	17,359
Receivables - CDE	183,710	242,906	-	-
Advances to employees	22,287	19,658	-	-
Contract asset of transmission	23,535	-	226,117	-
Others	186,923	200,724	125,681	143,183
(-) Allowance for doubtful accounts (note 6)	(28,698)	(29,379)	-	-
Total	811,005	900,498	927,440	840,192

Pledges, funds and restricted deposits: guarantees offered for transactions conducted in the CCEE and short-term investments required by the subsidiaries' loans agreements.

Orders in progress: encompass costs and revenues related to ongoing decommissioning or disposal of intangible assets and the service costs related to expenditure on projects in progress under the Energy Efficiency ("PEE") and Research and Development ("P&D") programs. Upon the closing of the respective projects, the balances are amortized against the respective liability recognized in Other Payables (note 22).

Energy pre-purchase agreements: refer to prepayments made by subsidiaries, which will be settled with energy to be supplied in the future.

GSF Insurance Premium: refers to the GSF premium paid in advance by the subsidiaries Ceran, CPFL Jaguari Geração (Paulista Lajeado) and CPFL Renováveis, related to the transfer of the hydrological risks to the Centralizing Account for Tariff Flag Resources ("CCRBT"), amortized as other operating expenses on a straight-line basis.

Receivables – CDE: refer to: (i) low income subsidies totaling R\$ 12,536 (R\$15,930 as of December 31, 2017). (ii) other tariff discounts granted to consumers amounting to R\$ 170,858 (R\$224,936 as of December 31, 2017) and (iii) tariff discounts – judicial injunctions totaling R\$ 317 (R\$ 2,039 as of December 31, 2017).

In 2018 the subsidiaries matched the receivables relating to CDE to the payables relating to the Energy Development Account (CDE) (note 22) amounting to R\$2,875 authorized by Order No. 1,576/2016.

Contract asset of transmission companies: refers to the right to receive the "Permitted Annual Revenue – RAP" to be received over the concession period as well as the indemnity at the end of the concession of

the transmission subsidiaries (note 3.2 – transmission companies).

(12) INVESTMENTS

	Dec 31, 2018	Dec 31, 2017
Permanent equity interests - equity method		
By equity method of the joint venture	970,302	990,910
Fair value of assets, net	10,060	10,640
Total	980,362	1,001,550

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In the financial statements, the investment balances relate to interests in entities accounted for by the equity method:

	Share of equity		Share of profit (loss)		
	Dec 31, 2018	Dec 31, 2017	2018	2017	2016
Joint ventures					
Baesa	175,189	187,654	791	11,849	9,853
Enercan	175,122	176,998	101,392	85,808	117,112
Chapecoense	378,558	385,870	127,250	120,651	117,451
EPASA	241,433	240,388	105,343	94,663	67,577
Fair value adjustments of assets, net	10,060	10,640	(579)	(579)	(579)
	980,363	1,001,550	334,198	312,390	311,414

12.1 - Dividends and Interest on capital

At December 31, 2018 and 2017, the Group has the following amounts receivable from the joint ventures below, relating to dividends and interest on capital:

Investments	Dividend		Interest on own capital		Total	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Investco	-	-	1,436	2,118	1,436	2,118
Baesa	3	108	-	-	3	108
Enercan	65,010	21,184	-	-	65,010	21,184
Chapecoense	33,733	32,734	-	-	33,733	32,734
Total	98,746	54,026	1,436	2,118	100,182	56,145

12.2 – Joint Ventures

Summarized financial information on joint ventures at December 31, 2018 and 2017 and income statement for the years ended December 31, 2018, 2017 and 2016 is as follows:

Joint venture	December 31, 2018			
	Enercan	Baesa	Chapecoense	Epasa
Current assets	208,326	68,956	345,737	326,084
Cash and cash equivalents	66,519	17,425	184,002	18,269
Noncurrent assets	1,033,320	966,664	2,604,162	503,618
Current liabilities	385,271	50,639	424,635	152,168
Borrowings and debentures	137,225	-	138,706	34,473
Other financial liabilities	5,869	34,832	74,156	1,346

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Noncurrent liabilities	496,953	284,391	1,782,993	224,933
Borrowings and debentures	383,358	-	1,045,402	151,964
Other financial liabilities	26,936	272,079	734,630	-
Equity	359,422	700,590	742,271	452,601
Net operating revenue	591,875	321,142	863,861	840,005
Operational costs and expenses	(188,756)	(214,448)	(191,749)	(562,097)
Depreciation and amortization	(50,051)	(50,609)	(117,858)	(34,525)
Interest income	4,793	4,176	15,729	5,106
Interest expense	(46,042)	(53,946)	(191,818)	(17,491)
Income tax expense	(101,484)	(1,229)	(124,284)	(38,740)
Profit (loss) for the year	208,100	3,164	249,510	197,481
Equity Interests and voting capital	48.72%	25.01%	51.00%	53.34%

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	December 31, 2017			
Joint venture	Enercan	Baesa	Chapecoense	Epasa
Current assets	182,843	124,361	329,721	319,222
Cash and cash equivalents	48,695	17,873	116,425	74,741
Noncurrent assets	1,101,291	1,030,904	2,745,989	531,527
Current liabilities	291,010	121,369	426,695	157,343
Borrowings and debentures	140,090	63,154	138,788	34,299
Other financial liabilities	4,085	17,113	67,897	993
Noncurrent liabilities	629,850	283,456	1,892,407	242,765
Borrowings and debentures	510,874	-	1,172,181	186,373
Other financial liabilities	25,115	265,250	716,986	-
Equity	363,273	750,440	756,608	450,641
Net operating revenue	580,430	412,329	829,525	789,402
Operational costs and expenses	(273,339)	(265,955)	(186,638)	(518,352)
Depreciation and amortization	(52,773)	(50,621)	(126,811)	(35,640)
Interest income	32,849	4,906	24,639	6,102
Interest expense	(31,135)	(27,986)	(183,237)	(26,197)
Income tax expense	(88,229)	(25,442)	(123,307)	(39,892)
Profit (loss) for the year	176,113	47,385	236,570	177,458
Equity Interests and voting capital	48.72%	25.01%	51.00%	53.34%

	2016			
Joint venture	Enercan	Baesa	Chapecoense	Epasa
Net operating revenue	564,966	239,730	789,732	548,145
Operational costs and expenses	(137,159)	(76,985)	(140,212)	(328,093)
Depreciation and amortization	(53,888)	(51,429)	(126,770)	(35,075)
Interest income	31,602	9,115	35,113	10,329
Interest expense	(36,275)	(23,691)	(125,192)	(23,128)
Income tax expense	(121,223)	(20,401)	(106,683)	(28,011)
Profit (loss) for the year	240,363	39,405	212,294	126,665
Equity Interests and voting capital	48.72%	25.01%	51.00%	53.34%

Although holding more than 50% in EPASA and Chapecoense, CPFL Geração controls these investments jointly with other shareholders. The analysis of the classification of the type of investment is based on the Shareholders' Agreement of each joint venture.

The borrowings from the BNDES obtained by the joint ventures ENERCAN, BAESA and Chapecoense establish restrictions on the payment of dividends to subsidiary CPFL Geração above the mandatory minimum dividend of 25% without the prior consent of the BNDES.

12.3 – Joint operation

Through its wholly-owned subsidiary CPFL Geração, the Company holds part of the assets of the Serra da Mesa hydropower plant, located on the Tocantins River, in Goiás State. The concession and operation of the hydropower plant belong to Furnas Centrais Elétricas S.A. In order to maintain these assets operating jointly with Furnas (joint operation), CPFL Geração was assured 51.54% of the installed power of 1,275 MW (657 MW) and the assured energy of mean 637.5 MW (mean 328.57 MW) until 2028.

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(13) PROPERTY, PLANT AND EQUIPMENT

	Land	Reservoirs, dams and water mains	Buildings, construction and improvements	Machinery and equipment	Vehicles	Furniture and fittings	In progress	Total
At December 31, 2015	176,807	1,376,246	1,075,982	5,824,089	36,230	9,696	674,166	9,173,217
Historical cost	198,141	1,965,641	1,516,228	7,878,838	52,947	22,323	674,166	12,308,285
Accumulated depreciation	(21,334)	(589,395)	(440,246)	(2,054,749)	(16,717)	(12,627)	-	(3,135,068)
Additions	-	171	-	236	-	-	1,084,612	1,085,019
Disposals	-	-	(421)	(6,705)	(1,249)	(779)	(26,696)	(35,850)
Transfers	8,325	95,799	177,902	1,160,915	22,467	456	(1,465,864)	-
Reclassification - cost	(137)	(1,434)	(40,852)	52,205	12	(39)	(1,219)	8,536
Transfers from/to other assets - cost	-	3	-	(5,025)	(167)	(452)	(10,523)	(16,164)
Depreciation	(7,632)	(75,659)	(54,035)	(377,529)	(8,888)	(1,676)	-	(525,420)
Write-off of depreciation	(7)	1	62	4,694	480	254	-	5,484
Reclassification - depreciation	(1,211)	(967)	(5,374)	(1,002)	7	11	-	(8,536)
Transfers from/to other assets - depreciation	-	3	(46)	1,374	150	91	-	1,572
Impairment losses	-	-	-	-	-	-	(5,221)	(5,221)
Business combination	-	-	-	2,140	27,175	-	1,049	30,364
At December 31, 2016	176,145	1,394,162	1,153,220	6,655,391	76,217	7,562	250,302	9,712,998
Historical cost	206,330	2,060,191	1,652,934	9,066,408	106,920	21,507	250,302	13,364,592
Accumulated depreciation	(30,185)	(666,028)	(499,714)	(2,411,017)	(30,704)	(13,945)	-	(3,651,594)
Additions	-	-	-	772	2,978	-	753,137	756,887
Disposals	(22)	(132)	(140)	(32,336)	(2,248)	(635)	(8,332)	(43,845)
Transfers	2,950	400	154,737	574,944	20,434	1,484	(754,948)	-
Transfers from/to other assets - cost	(1,893)	6,393	(154,880)	98,579	(126)	(330)	11,033	(41,224)
Depreciation	(8,004)	(79,276)	(59,736)	(431,393)	-	(1,332)	-	(597,795)

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						(18,055)		
Write-off of depreciation	2	124	120	9,529	1,379	387	-	11,540
Transfers from/to other assets - depreciation	(683)	(2,413)	1,930	9,690	(8)	108	-	8,624
Business Combination Impairment losses	-	-	-	-	(4,800)	-	-	(4,800)
	-	-	(474)	(14,787)	-	-	-	(15,261)
At December 31, 2017	168,494	1,319,257	1,094,777	6,870,389	75,771	7,245	251,192	9,787,125
Historical cost	207,365	2,066,850	1,652,178	9,693,512	122,540	22,026	251,192	14,015,662
Accumulated depreciation	(38,870)	(747,593)	(557,400)	(2,823,123)	(46,769)	(14,782)	-	(4,228,537)
Additions	-	-	-	-	-	-	296,165	296,165
Disposals	(8)	-	(7,908)	(16,434)	(3,517)	(31)	(8,478)	(36,376)
Transfers	20,181	151,754	41,464	101,468	12,250	793	(327,908)	-
Transfers from/to other assets - cost	(2,755)	-	(100,720)	106,775	-	6	(6,584)	(3,279)
Depreciation	(8,082)	(79,237)	(61,540)	(432,524)	(19,402)	(546)	-	(601,329)
Write-off of depreciation	2	-	-	8,180	2,032	44	-	10,259
Transfers from/to other assets - depreciation	(994)	-	20,714	(22,706)	(2)	-	-	(2,987)
Others	-	-	15	645	-	-	6,373	7,033
At December 31, 2018	176,839	1,391,775	986,800	6,615,793	67,135	7,512	210,760	9,456,614
Historical cost	224,783	2,218,604	1,585,723	9,905,396	131,549	23,039	210,760	14,299,854
Accumulated depreciation	(47,944)	(826,829)	(598,923)	(3,289,603)	(64,415)	(15,527)	-	(4,843,240)
Average depreciation rate 2018	3.86%	3.65%	3.96%	4.45%	13.89%	3.70%		
Average depreciation rate 2017	3.86%	3.93%	3.69%	4.53%	13.09%	8.31%		
Average depreciation rate 2016	3.86%	3.69%	3.30%	4.19%	14.31%	10.01%		

The balance of construction in progress refers mainly to works in progress of the operating subsidiaries and/or those under development, especially for CPFL Renováveis' projects, which has construction in progress of R\$ 139,614 as of December 31, 2018 (R\$197,305 at December 31, 2017).

In accordance with IAS 23, the interest on borrowings taken by subsidiaries to finance the works is capitalized during the construction phase. During 2018, R\$10,591 (R\$ 29,817 in 2017 and R\$ 54,733 in 2016) was capitalized in the financial statements at a rate of 8.74% p.a. (8.80% p.a. in 2017 and 11.70% p.a. in 2016).

In the financial statements, depreciation expenses are recognized in the statement of profit or loss in line item "depreciation and amortization" (note 27).

At December 31, 2018, the total amount of property, plant and equipment pledged as collateral for borrowings, as mentioned in note 16, is R\$ 4,237,048, mainly relating to the subsidiary CPFL Renováveis (R\$ 4,183,534).

13.1 Impairment testing

For all the reporting years the Company assesses whether there are indicators of impairment of its assets that would require an impairment test. The assessment was based on external and internal information sources, taking into account fluctuations in interest rates, changes in market conditions and other factors.

In 2017, due to the changes in the Brazilian political, economic and energy scenario, the subsidiary CPFL Renováveis recognized a loss of R\$ 15,261 relating to property, plant and equipment of the Bio Baia Formosa and Solar Tanquinho projects. This loss was recognized in the statement of profit or loss in line item "Other operating expenses" (note 27). For 2018, based on the mentioned assessment of any indicators, it was not necessary to set up a provision for impairment.

Such impairment was based on the assessment of the cash-generating units comprising fixed assets of subsidiaries which, separately, are not featured as an operating segment (note 29). Additionally, during 2018 and 2017 the Company did not change the form of aggregation of the assets for identification of these cash-generating units.

Fair value was measured by using the cost approach, a valuation technique that reflects the amount that would be required at present to replace the service capacity of an asset (normally referred to as the cost of substitution or replacement). A provision for impairment of assets, when applicable, is recognized owing to the unfavorable scenario for the business of these subsidiaries and is calculated based on their fair values, net of selling expenses.

(14) INTANGIBLE ASSETS AND CONTRACT ASSETS IN PROGRESS**14.1 Intangible assets**

	Goodwill	Acquired in business combinations	Concession right Distribution infrastructure - operational	Distribution infrastructure - in progress	Public utilities	Other intangibles
As of December 31, 2015	6,115	4,355,546	4,249,182	499,627	28,743	71,110
Historical cost	6,152	7,441,902	10,348,857	499,627	35,840	192,500
Accumulated Amortization	(37)	(3,086,356)	(6,099,675)	-	(7,097)	(121,500)
Additions	-	-	-	1,213,924	-	10,000
Amortization	-	(255,110)	(498,891)	-	(1,419)	(12,400)
Transfer - intangible assets	-	-	610,032	(610,032)	-	-
Transfer - financial asset	-	-	9,452	(664,908)	-	-
Disposal and transfer - other assets	-	(7,283)	(48,346)	-	-	(7,400)
Business combination	-	413,796	1,229,074	227,398	-	-
Impairment losses	-	(40,433)	-	-	-	(2,600)
As of December 31, 2016	6,115	4,466,516	5,550,502	666,008	27,324	59,110
Historical cost	6,152	7,602,941	11,987,109	666,008	35,840	183,500
Accumulated Amortization	(37)	(3,136,425)	(6,436,607)	-	(8,516)	(123,500)
Additions	-	-	-	1,898,434	-	9,000
Amortization	-	(286,215)	(639,292)	-	(1,419)	(9,300)
Transfer - intangible assets	-	-	814,643	(814,643)	-	-
Transfer - financial asset	-	-	131	(972,385)	-	-
Disposal and transfer - other assets	-	(16,244)	(91,214)	48,061	-	1,000
Corporate restructuring - note 14.4.1	-	(26,766)	(73,215)	-	-	-
Impairment losses	-	(5,129)	-	-	-	-
Business combination	-	(15,057)	(7,108)	-	-	-
As of December 31, 2017	6,115	4,117,105	5,554,447	825,476	25,904	60,110
Historical cost	6,152	7,558,645	11,442,528	825,476	35,840	174,500
Accumulated Amortization	(37)	(3,441,540)	(5,888,080)	-	(9,936)	(113,500)
Additions	-	-	-	-	-	18,000
Amortization	-	(286,858)	(703,511)	-	(1,419)	(8,900)
Transfer - intangible assets	-	-	723,813	-	-	-
Transfer - financial asset	-	-	52,803	-	-	-
Disposal and transfer - other assets	-	(63,187)	(43,419)	-	-	5,000
IFRS 15 adoption (note 3)	-	-	-	(825,476)	-	-
Others	-	5,130	-	-	-	-

As of December 31, 2018	6,115	3,772,188	5,584,136	-	24,485	76,
Historical cost	6,152	7,495,458	11,909,149	-	35,840	217,
Accumulated Amortization	(37)	(3,723,270)	(6,325,012)	-	(11,355)	(141,5

The amortization of intangible assets is recognized as follows: (i) “depreciation and amortization” for amortization of distribution infrastructure intangible assets, use of public asset and other intangible assets; and (ii) “amortization of concession intangible asset” for amortization of the intangible asset acquired in business combination (note 27).

In conformity with IAS 23, the interest on borrowings taken by subsidiaries for construction financing is capitalized during the construction stage for qualifying assets. In the consolidated, for of the year of 2018, R\$ 18,015 were capitalized at a rate of 7.99% p.a.. In 2017, R\$ 20,726 were capitalized in Intangible Asset in progress, at a rate of 8.17% p.a..

14.1.1 Intangible asset acquired in business combinations

The breakdown of the intangible asset related to the right to operate the concessions acquired in business combinations is as follows:

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	Historical cost	Dec 31, 2018 Accumulated amortization	Dec 31, 2017		Annual amortization rate		
			Net value	Net value	2018	2017	2016
Intangible asset - acquired in business combinations							
Intangible asset acquired, not merged							
Parent company							
CPFL Paulista	304,861	(216,988)	87,873	97,858	3.28%	3.28%	3.28%
CPFL Piratininga	39,065	(26,335)	12,730	14,025	3.32%	3.31%	3.31%
RGE	-	-	-	1,752	-	4.70%	4.24%
RGE Sul (RGE)	3,768	(2,193)	1,575	-	4.70%	-	-
CPFL Geração	54,555	(37,333)	17,221	19,067	3.38%	3.38%	3.38%
CPFL Jaguarí							
Geração	7,896	(4,121)	3,775	4,044	3.41%	3.41%	3.41%
CPFL Renováveis	3,653,906	(1,051,284)	2,602,622	2,818,331	5.90%	4.16%	5.39%
Subtotal	4,064,051	(1,338,255)	2,725,797	2,955,077			
Intangible asset acquired and merged							
RGE	-	-	-	234,297	-	2.11%	2.11%
RGE Sul (RGE)	1,433,007	(971,212)	461,795	279,553	3.63%	9.09%	9.09%
CPFL Geração	426,450	(333,430)	93,020	102,987	2.34%	2.34%	2.34%
Subtotal	1,859,457	(1,304,642)	554,816	616,837			
Intangible asset acquired and merged – Reassessed							
CPFL Paulista	1,074,026	(786,870)	287,156	319,360	3.00%	3.00%	3.00%
CPFL Piratininga	115,762	(78,039)	37,723	41,560	3.31%	3.31%	3.31%
RGE	-	-	-	125,785	-	4.09%	4.09%
CPFL Jaguarí							
Geração	15,275	(8,837)	6,438	6,898	3.01%	3.01%	3.01%
RGE Sul (RGE)	366,887	(206,630)	160,256	51,588	4.67%	9.09%	-
Subtotal	1,571,949	(1,080,375)	491,574	545,191			
Total	7,495,458	(3,723,270)	3,772,187	4,117,105			

The intangible asset acquired in business combinations is associated to the right to operate the concessions and comprises:

- Intangible asset acquired, not merged

Refers basically to the intangible asset from acquisition of the shares held by noncontrolling interests prior to adoption of IFRS 3.

- Intangible asset acquired and merged

Refers to the intangible asset from the acquisition of subsidiaries that were merged into the respective equity, without application of CVM Instructions No. 319/99 and No. 349/01, that is, without segregation of the amount of the tax benefit.

- Intangible asset acquired and merged – Reassessed

In order to comply with ANEEL requirements and avoid the amortization of the intangible asset resulting from the merger of parent company causing a negative impact on dividends paid to noncontrolling interests, the subsidiaries applied the concepts of CVM Instructions No. 319/99 and No. 349/01 to the intangible asset. A reserve was therefore recognized to adjust the intangible, against a special intangible reserve on the merger of equity in each subsidiary, so that the effect of the transaction on the equity reflects the tax benefit of the merged intangible asset. These changes affected the Company's investment in subsidiaries, and in order to adjust this, a non-deductible intangible asset was recognized for tax purposes.

14.2 Impairment testing

For all the reporting years the Company assesses whether there are indicators of impairment of its assets that would require an impairment test. The assessment was based on external and internal information sources, taking into account fluctuations in interest rates, changes in market conditions and other factors.

In 2017, the subsidiary CPFL Renováveis recognized a loss of R\$ 5,176 (R\$ 40,433 in 2016), relating to intangible assets acquired in the business combination of the Pedra Cheirosa I and Bio Formosa projects. For 2018, based on the mentioned assessment of any indicators, it was not necessary to set up a provision for impairment.

The provision for impairment were based on the assessment of the cash-generating units comprising intangible assets of those subsidiaries which, separately, are not featured as an operating segment (note 29). Additionally, during 2018 and 2017 the Company did not change the form of aggregation of the assets for identification of these cash-generating units.

Fair value was measured by using the cost approach, a valuation technique that reflects the amount that would be required at present to replace the service capacity of an asset (normally referred to as the cost of substitution or replacement). A provision for impairment of assets was recognized owing to the unfavorable scenario for the business of these subsidiaries and it was calculated based on their fair values, net of selling expenses.

14.3 Contract asset - in progress

Accordingly with IFRS 15, concession infrastructure assets of the distribution companies during the construction period, previously recorded as intangible in progress, are now classified as contract assets (note 3).

	Contract asset - in progress
At December 31, 2017	-
Adoption of IFRS 15 (note 3)	825,476
Additions	1,787,588
Transfer - intangible assets	(723,813)
Transfer - financial assets	(836,516)
Disposal and transfer - other assets	(6,303)
At December 31, 2018	1,046,433
Noncurrent	1,046,433

14.4 Corporate restructurings on 2017

14.4.1 Merger of CPFL Jaguariúna

At the Extraordinary General Meeting “EGM” held on December 15, 2017, approval was given for the merger of CPFL Jaguariúna into RGE Sul. Accordingly, the merged company was wound up and RGE Sul became the successor to its assets, rights and obligations.

At the time of the merger, the concepts of CVM Instructions No. 319/99 and No. 349/01 were applied, which resulted in the recognition on the consolidated financial statements of an intangible asset rectifying account, generating a tax credit of R\$ 99,981 (note 9).

14.4.2 Grouping of subsidiaries Companhia Luz e Força Santa Cruz, Companhia Leste Paulista de Energia, Companhia Jaguari de Energia, Companhia Sul Paulista de Energia and Companhia Luz and Força de Mococa

On November 21, 2017, ANEEL through Resolution No. 6,723/2017 authorized the grouping of the power distribution companies Companhia Luz e Força Santa Cruz, Companhia Leste Paulista de Energia, Companhia Sul Paulista de Energia, Companhia Luz e Força de Mococa and Companhia Jaguari de Energia, pursuant to Normative Resolution No. 716/2016 of May 3, 2016. Effective as of January 1, 2018, the operations of these subsidiaries are controlled only by Companhia Jaguari de Energia, which adopted the trade name "CPFL Santa Cruz". This operation was approved by the EGM held on December 31, 2017 at the grouped companies. This grouping caused no effect in the consolidated financial statements".

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14.5 Corporate restructurings on 2018**14.5.1 Merger of RGE and RGE Sul**

On December 4, 2018, through Authorizing Resolution No. 7,499/2018 ANEEL authorized the merger of the electric energy distribution companies RGE and RGE Sul, in accordance with Normative Resolution No. 716/2016 of May 3, 2016. Since January 1, 2019 the operations of these subsidiaries are carried out only by RGE Sul, which adopted the trade name "RGE". This operation was approved at the Extraordinary General Meeting ("EGM") held on December 31, 2018.

(15) TRADE PAYABLES

	Dec 31, 2018	Dec 31, 2017
<u>Current</u>		
System service charges	62,674	413
Energy purchased	1,607,116	2,248,748
Electricity network usage charges	205,656	252,170
Materials and services	368,344	650,538
Energy from the Free Market	154,296	145,002
Total	2,398,085	3,296,870
<u>Noncurrent</u>		
Energy purchased	333,036	128,438
Total	333,036	128,438

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(16) BORROWINGS

The movements in borrowings are as follows:

	At December 31, 2017	Raised	Repayment	Interest, inflation adjustment and mark to market	Exchange rates	Interest paid	At December 31, 2018
Measured at cost							
Local currency							
Fixed Rate	900,257	166,404	(173,528)	53,283	-	(53,641)	892,776
Floating Rate							
TJLP and TLP	3,449,468	1,315,898	(442,504)	288,171	-	(262,744)	4,348,289
Selic	140,099	-	(33,875)	11,251	-	(3,358)	114,117
CDI	1,541,278	23,359	(1,112,713)	72,957	-	(138,609)	386,272
IGP-M	57,291	-	(10,511)	9,788	-	(4,679)	51,889
UMBNDDES	2,293	-	(500)	515	-	(156)	2,152
Others	74,740	32,418	(45,807)	6,477	-	(1,426)	66,403
Total at cost	6,165,427	1,538,079	(1,819,438)	442,442	-	(464,613)	5,861,896
Borrowing costs *	(31,816)	(35,984)	-	10,607	-	-	(57,193)
Measured at fair value							
Foreign currency							
Dollar	4,698,184	2,666,880	(3,289,857)	170,383	774,483	(164,965)	4,855,108
Euro	218,814	879,500	(215,824)	3,348	(1,873)	(4,466)	879,499
Mark to market	(58,552)	-	-	(44,799)	-	-	(103,351)
Total at fair value	4,858,446	3,546,380	(3,505,681)	128,932	772,610	(169,431)	5,631,255
Total	10,992,057	5,048,475	(5,325,119)	581,980	772,610	(634,044)	11,435,958
Current	3,589,607						2,446,113
Noncurrent	7,402,450						8,989,846

(*) In accordance with IFRS 9, this refers to the fundraising costs attributable to issuance of the respective debts.

The detail on borrowings are as follows:

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Category	Annual interest	December 31, 2018	December 31, 2017	Maturity range	
Measured at cost - Local Currency					
Fixed rate					
FINEM	Fixed rate de 2.5% to 8% (a)	418,336	546,504	2011 to 2024	(i) CPFL Energi (iii) Pledge of st of operation Re
FINAME	Fixed rate de 2.5% to 10% (a)	48,672	71,780	2012 to 2025	(i) Liens on equi E
FINEP	Fixed rate from 3.5% to 8%	6,576	10,482	2013 to 2021	
Bank loans	Fixed rate of 9.5% to 10.14% and discount for timely payment of 15% and 25%	419,191	271,492	2009 to 2037	(i) Liens on equi authorized by AF Éne
		892,776	900,257		
Floating rate					
TJLP and TLP					
FINEM	TJLP and TJLP + from 1.72% to 3.4% (b)	3,128,625	3,406,017	2009 to 2033	(i) Bank gua receivables, e rights author equipment and Re
FINEM	TLP + 4.74% to 4.80% (b)	1,190,169	-	2027 to 2028	CP
FINAME	TJLP + 2.2% to 4.2% (b)	20,935	23,181	2017 to 2027	(i) CPFL Energi
FINEP	TJLP and TJLP -1%	3,491	13,997	2016 to 2024	
Bank loans	TJLP + 2.99% to 3.1%	5,069	6,273	2005 to 2023	(i) Pledge of re conc
		4,348,289	3,449,468		
SELIC					
FINEM	SELIC + 2.19% to 2.66% (c)	108,752	134,260	2015 to 2022	(i)SGBP and C

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FINAME	SELIC + 2.70% to 3.90%	5,365	5,840	2016 to 2022	CPFL Energia
CDI		114,117	140,099		
Bank loans	(i) From 100.00% to 109.50% of CDI (c)	208,384	885,715	2012 to 2024	(i) CPFL En Renovávei
Bank loans	(ii) CDI + 0.10% to 1.90%	177,888	443,035	2017 to 2023	
Promissory note	(i) 104% of CDI (ii) CDI + 1.39%	-	110,523	2018	CPFL
Promissory note	(i) 105% of CDI (ii) CDI + 0.5% to 3.40%	-	102,006	2017 to 2018	
	CDI + 3.80%	386,272	1,541,278		
IGPM					
Bank loans	IGPM + 8.63%	51,889	57,291	2011 to 2024	(i) Liens on equ and rights au
UMBNDDES					
Bank loans	UMBNDDES + from 1.99% to 5%	2,152	2,293	2006 to 2023	(i) Pledge of concession rig
Other					
Other		66,403	74,740	2007 to 2038	(i) Promissory Pledge of receiva
Total - Local currency		5,861,896	6,165,427		
Borrowing costs (*)		(57,193)	(31,816)		
Measured at fair value - Foreign Currency Dollar					
Bank loans (Law 4.131)	US\$ + Libor 3 months + from 0.80% to 3%	-	2,879,241	2017 to 2022	CPFL
Bank loans (Law 4.131)	(c)	1,866,418	704,572	2017 to 2022	CPFL
a) IFRS 16 – Leases					411

	US\$ + Libor 3 months + from 0.8% to 1.55%				
Bank loans (Law 4.131)	US\$ +from 1.93% to 4.32%	2,988,689	1,114,370	2017 to 2021	CPFL
		4,855,108	4,698,184		
Euro					
Bank loans (Law 4.131)	Euro + from 0.42% to 0.96%	879,499	218,814	2019 to 2021	CPFL
Mark to market		(103,351)	(58,552)		
Total in foreign currency		5,631,255	4,858,446		
Total		11,435,958	10,992,057		

(*) In accordance with IFRS 9, this refers to borrowing costs directly attributable to the issuance of the respective debts, measured at cost.

The subsidiaries hold swaps converting the operating cost of currency variation to interest tax variation in reais. For further information about the considered rates, see note 33.

Effective rate:

(a) 30% to 70% of CDI	(b) 60% to 110% of CDI	(c) 100% to 130% of CDI
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As segregated in the tables above, in conformity with IFRS 9, the Group classified their debts as (i) financial liabilities (measured at amortized cost), and (ii) financial liabilities measured at fair value through profit or loss.

The objective of the classification as financial liabilities of borrowings measured at fair value is to compare the effects of the recognition of income and expenses derived from marking to market of derivatives, debt-related derivatives, in order to obtain more relevant and consistent accounting information. At December 31, 2018, the balance of the borrowings measured at fair value was R\$ 5,631,255 (R\$ 4,858,445 at December 31, 2017).

Changes in the fair values of these borrowings are recognized in the finance income / cost of the Group, except for the component of credit risk calculation, which is recorded in other comprehensive income. At December 31, 2018, the accumulated gains of R\$ 103,351 (R\$ 58,552 at December 31, 2017) on marking the borrowings to market, offset by the losses of R\$ 65,678 (losses of R\$ 51,145 at December 31, 2017) of marking to market the derivative financial instruments contracted as a hedge against foreign exchange variations (note 33), resulted in a total net gain of R\$ 37,673 (R\$ 7,407 at December 31, 2017).

The maturities of the principal of borrowings recorded in noncurrent liabilities are scheduled as follows:

2020	1,397,666
2021	1,669,749
2022	2,402,921
2023	844,340
2024	606,929
2025 to 2029	1,607,254
2030 to 2034	435,200
2035 to 2039	105,994
2040 to 2044	5,617
Subtotal	9,075,670
Mark to market	(85,824)
Total	8,989,846

The main ratios used for inflation adjustment of the borrowings and the indebtedness profile in local and foreign currency, already considering the effects of the derivative instruments, are shown below:

Index	Accumulated variation (%)		% of debt	
	2018	2017	Dec 31, 2018	Dec 31, 2017
IGP-M	7.54	(0.52)	0.45	0.52
TJLP and TLP	6.72 and 7.42	7.00	38.02	31.38
CDI	6.40	6.89	52.62	59.49
Others			8.90	8.60
			100.00	100.00

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Main borrowings in the year:

Bank / credit issue	Total approved	Released in 2018	Released net of fundraising costs	Interest	Utilization
Local Currency:					
Investment:					
Fixed rate					
Bank loans	170,152	166,404	164,601	Monthly	Investment plan
Floating rate					
CDI					
Bank loans (a)	16,000	16,000	16,000	Bullet	Working capital
Bank loans (a)	7,360	7,360	7,360	Semiannual	Working capital
TJLP and TLP					
FINEM	209,510	125,515	124,130	Monthly	Investment plan
FINEM	2,608,634	1,190,000	1,161,994	Monthly	Investment plan
FINAME (a)	79,331	384	384	Quarterly	Purchase of machinery and equipment
Other					
Bank loans	39,054	32,418	30,903	Monthly	Investment plan
Foreign currency:					
Dollar					
Bank loans (Law 4.131)	2,666,880	2,666,880	2,666,880	Quarterly	Working capital
Euro					
Bank loans (Law 4.131)	879,500	879,500	879,500	Quarterly	Working capital
	6,676,421	5,084,461	5,051,752		

(a) the agreement has no restrictive covenants

Pre-payment

In 2018, R\$ 2,202,406 were settled in advance relating to borrowings with original maturities until June 2024.

RESTRICTIVE COVENANTS

Borrowings raised by Group companies require the compliance with certain restrictive financial clauses, under penalty of restriction in the distribution of dividends and/or advance maturity of the related debts. Furthermore, failure to comply with the obligations or restrictions mentioned may result in default in relation to other contractual obligations (*cross default*), depending on each borrowing agreement.

The calculations are made on an annual or semiannual basis, as appropriate. As the maximum and minimum ratios vary among the contracts, we present below the most critical parameters of each ratio, considering all contracts in effect at December 31, 2018:

Ratios required for the individual financial statements of its subsidiaries CPFL Paulista, CPFL Piratininga, CPFL Santa Cruz and RGE, which own contracts:

- Net indebtedness divided by EBITDA maximum between 3.50 and 3.75 and
- Net indebtedness divided by the sum of Equity and Net indebtedness maximum of 0.9.

Ratios required for the individual of subsidiaries financial statements of CPFL Renováveis owners of the contract:

- Debt Service Coverage Ratio minimum between 1.0 and 1.3.
- Company capitalization ratio minimum between 25% and 39.5%.
- General Indebtedness Ratio maximum of 80%.

Ratios required in the consolidated financial statements of CPFL Renováveis

- Net indebtedness divided by EBITDA maximum of 3.75.
- Net indebtedness divided by the sum of Equity and Net indebtedness maximum of 0.55.

Ratios required for the consolidated financial statements of CPFL Energia

- Net indebtedness divided by EBITDA maximum of 3.75.
- Net indebtedness divided by the sum of Equity and Net indebtedness maximum of 0.72.
- EBITDA divided by the financial income (expenses) minimum of 2.25.

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Ratio required in the consolidated financial statements of State Grid Brazil Power Participações S.A.

- Equity divided by Total Assets (disregarding the effects of IFRIC 12) minimum of 0.3.

For purposes of determining covenants, the definition of EBITDA at the Company takes into consideration mainly the consolidation of subsidiaries, associates and joint ventures based on the Company's direct or indirect interests in those companies (for both EBITDA and assets and liabilities).

In 2018, a subsidiary of CPFL Renováveis obtained from BNDES a waiver from the acceleration of maturity for non-compliance with the DCSR in the financial statements of its subsidiary Bio Ester and with the financial ratios DCSR, Net Debt divided by EBITDA and Equity divided by the sum of Equity and Net Debt in the financial statements of its subsidiaries Bio Coopcana and Bio Alvorada. On the same occasion, CPFL Renováveis also obtained a waiver from the requirement of compliance with the mentioned ratios as from 2019.

In 2018, the subsidiary CPFL Piratininga obtained from BNDES and onlending banks authorization for waiver from the obligation to comply with the financial ratio Net Debt to EBITDA contained in the financing agreements for the year ended December 31, 2018.

The Group's management monitors these ratios on a systematic and constant basis, so that all conditions are met. The Group's management believes that all covenants and financial and non-financial clauses whose indicators are properly complied except by the mentioned above about the non direct subsidiary CPFL Renováveis at December 31, 2018, for which the subsidiary obtained the necessary approvals for waiver from financial institutions.

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(17) DEBENTURES

The movements in debentures are as follows:

Category	At December 31, 2017	Raised	Repayment	Interest, inflation adjustment and mark to market	Exchange rates	At December 31, 2018
Measured at cost - Floating rate						
TJLP	495,408	-	(46,768)	37,539	(5,080)	481,099
CDI	7,446,556	4,163,000	(4,832,370)	592,746	(652,185)	6,717,747
IPCA	1,311,432	-	-	118,026	(62,030)	1,367,428
Total at cost	9,253,396	4,163,000	(4,879,138)	748,311	(719,295)	8,566,274
Borrowing costs (*)	(76,870)	(17,261)	-	34,334	-	(59,796)
Measured at fair value - Floating rate						
IPCA	-	416,600	-	10,389	-	426,989
Mark to market	-	-	-	7,378	-	7,378
Total at fair value	-	416,600	-	17,767	-	434,367
Total	9,176,527	4,562,339	(4,879,138)	800,412	(719,295)	8,940,845
Current	1,703,073					917,352
Noncurrent	7,473,454					8,023,493

(*) In accordance with IFRS 9 this refers to borrowing costs directly attributable to the issuance of the respective debts.

The detail on debentures are as follows :

Category	Annual Interest		December 31, 2018	December 31, 2017	Maturity range	Collateral
Measured at cost - Floating rate						
TJLP	TJLP + 1%	(d)	481,099	495,408	2009 to 2029	Liens
CDI	(i) From 105.75% to 129.5% of CDI (ii) CDI + 0.27%	(a)	5,858,319	6,727,437	2015 to 2024	(i) CPFL Energia and CPFL-R guarantee (ii) Guarantee of CPFL

	to 1.90%					Energia (iii) Fiduciary assignment of PCH Holding dividends
	From 107.75% to 114.50% of CDI	(a)	859,428	719,119	2018 to 2022	No guarantee
IPCA	IPCA + from 4.42% to 5.86%	(b) (c)	1,367,428	1,311,432	2019 to 2027	CPFL Energia guarantee
			8,566,274	9,253,396		
	Borrowing costs (*)		(59,796)	(76,870)		
Measured at fair value - Floating rate						
IPCA	IPCA + 5.80%	(b)	426,989	-	2024 to 2026	CPFL Energia guarantee
	Mark to market		7,378	-		
			434,367	-		
	Total consolidated		8,940,845	9,176,526		

Some debentures hold swaps converting IPCA variation to CDI variation. For further information about the considered rates, see note 33.

Effective rates:

(a) From 105.4% to 144.6% of CDI | CDI + from 0.75% to 4.76%

(b) IPCA + 4.42% to 6.31%

(c) From 101.74% to 103.3% of CDI

(d) TJLP + 3.48%

(*) In accordance with IFRS 9 this refers to borrowing costs directly attributable to the issuance of the respective debts.

As shown in the table above, the Company, in compliance with IFRS 9, classified its debentures as (i) financial liabilities measured at amortized cost; and (ii) financial liabilities measured at fair value through profit or loss.

The classification of debentures measured at fair value as financial liabilities is aimed at matching the effects of the recognition of revenues and expenses derived from the mark-to-market of hedging derivatives linked to such debentures, in order to obtain a more relevant and consistent accounting information. As at December 31, 2018, the balance of debentures designated at fair value totaled R\$ 434,367.

The changes in the fair values of these debentures are recognized in the Company's finance income (costs), except for the component of credit risk calculation, which is recognized in other comprehensive income. As at December 31, 2018, the accumulated losses obtained from the mark-to-market of such debentures amounted to R\$ 7,378 which, offset by the gains obtained from the mark-to-market of the derivative instruments of R\$ 21,012, undertaken to hedge the interest rate changes (note 33), generated a total gain of R\$ 13,634.

The maturities of the debentures' principal recognized in noncurrent liabilities are scheduled as follows:

2020	303,327
2021	3,578,382
2022	1,571,891
2023	1,055,538
2024	819,690
2025 to 2029	577,107
2030 to 2034	110,180
Total	8,016,115
Mark to market	7,378
Total	8,023,493

Main debentures issuances during the year

The funds obtained from the main issuances were used in the investment plan, refinancing of debts and improvement of working capital of subsidiaries and the payment of interest is semiannual.

Category	Issue	Quantity issued	R\$ thousand	
			Released in 2018	Released net of fundraising costs
Floating rate				
CDI				
CPFL Paulista	9th issue	1,380,000	1,380,000	1,379,022
CPFL Piratininga	9th issue	215,000	215,000	214,739
CPFL Brasil	4th issue	115,000	115,000	114,848
CPFL Santa Cruz	2nd issue	190,000	190,000	189,737
RGE	9th issue	220,000	220,000	219,733
RGE Sul	6th issue	520,000	300,000	299,677
CPFL Geração	10th issue	190,000	190,000	189,838
CPFL Geração	11th issue	1,400,000	1,400,000	1,397,949
CPFL Renováveis	8th issue	153,000	153,000	151,245
IPCA				
CPFL Piratininga	10th issue	197,000	197,000	191,767

RGE Sul	7th issue	219,600	219,600	213,784
			4,579,600	4,562,339

Pre-payment

In 2018, R\$ 3,247,401 were paid of issue of debentures, whose due date were April 2019 to September 2021.

RESTRICTIVE COVENANTS

The debentures issued by the Group companies require the compliance with certain financial covenants.

The calculations are made on an annual or semiannual basis, as appropriate. As the maximum and minimum ratios vary among the contracts, we present below the most critical parameters of each ratio, considering all contracts in effect at December 31, 2018:

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Ratios required in the individual financial statements of the subsidiaries of CPFL Renováveis, issuers of debentures:

- Debt Service Coverage Ratio minimum of 1.2.
- Net indebtedness divided by Dividends Received maximum of 3.5.

Ratios required in the consolidated financial statements of CPFL Renováveis for debentures issued by CPFL Renováveis and its subsidiaries

- Net indebtedness divided by EBITDA maximum of 4.0.
- EBITDA divided by Financial income (expenses) minimum of 1.75.

Ratios required in the consolidated financial statements of CPFL Energia

- Net indebtedness divided by EBITDA maximum between 3.0 and 3.75.
- EBITDA divided by Financial income (expenses) minimum of 2.25.

On June 19, 2018, CPFL Renováveis obtained from debenture holders a waiver from the requirement of compliance with the Debt Service Coverage Ratio and the Debt Service Coverage Ratio of the Transaction related to the 1st issue of debentures of CPFL Renováveis.

The Group's management monitors these ratios on a systematic and constant basis, so that all conditions are met. The Group's management believes that all covenants and financial and non-financial clauses whose indicators are properly complied at December 31, 2018, except by the mentioned above about the non direct subsidiary CPFL Renováveis for which the holding had the proper approvals from the finance institutions.

(18) PRIVATE PENSION PLAN

The subsidiaries sponsor supplementary retirement and pension plans for their employees. The main characteristics of these plans are as follows:

18.1 Characteristics

CPFL Paulista

The plan currently in force for the employees of the subsidiary CPFL Paulista through FUNCESP is a Mixed Benefit Plan, with the following characteristics:

- i. Defined Benefit Plan ("BD") – in force until October 31, 1997 – a defined benefit plan, which grants a Proportional Supplementary Defined Benefit ("BSPS"), in the form of a lifetime income convertible into a pension, to participants enrolled prior to October 31, 1997, the amount being defined in proportion to the accumulated past service time up to that date, based on compliance with the regulatory requirements for granting. The total responsibility for coverage of actuarial deficits of this plan falls to the subsidiary.
- ii. Mixed model, as from November 1, 1997, which covers:
 - benefits for risk (disability and death), under a defined benefit plan, in which the subsidiary assumes responsibility for Plan's actuarial deficit, and
 - scheduled retirement, under a variable contribution plan, consisting of a benefit plan, which is a defined contribution plan up to the granting of the income, and does not generate any actuarial liability for the subsidiary CPFL Paulista. The benefit plan only becomes a defined benefit plan, consequently generating actuarial responsibility for the subsidiary, after the granting of a lifetime income, convertible or not into a pension.

Additionally, the subsidiary's Managers may opt for a Free Benefit Generator Plan – "PGBL" (defined contribution), operated by either Banco do Brasil or Bradesco.

CPFL Piratininga

As a result of the spin-off of Bandeirante Energia S.A. (subsidiary's predecessor), the subsidiary CPFL Piratininga assumed the responsibility for the actuarial liabilities of that company's employees retired and terminated until the date of spin-off, as well as for the obligations relating to the active employees transferred to CPFL Piratininga.

On April 2, 1998, the Secretariat of Pension Plans – "SPC" approved the restructuring of the retirement plan previously maintained by Bandeirante, creating a "Proportional Supplementary Defined Benefit Plan – BSPS", and a "Mixed Benefit Plan", with the following characteristics:

- i. Defined Benefit Plan ("BD") - in force until March 31, 1998 – a defined benefit plan, which grants a Proportional Supplementary Defined Benefit (BSPS), in the form of a lifetime income convertible into a pension to participants enrolled until March 31, 1998, in an amount calculated in proportion to the accumulated past service time up to that date, based on compliance with the regulatory requirements for granting. In the event of death while working or the onset of a disability, the benefits incorporate the entire past service time. CPFL Piratininga has full responsibility for covering the actuarial deficits of this Plan.

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- ii. Defined Benefit Plan - in force after March 31, 1998 – defined-benefit type plan, which grants a lifetime income convertible into a pension based on the past service time accumulated after March 31, 1998, based on 70% of the average actual monthly salary for the last 36 months of active service. In the event of death while working or the onset of a disability, the benefits incorporate the entire past service time. The responsibility for covering the actuarial deficits of this Plan is equally divided between CPFL Piratininga and the participants.
- iii. Variable Contribution Plan – implemented together with the Defined Benefit plan effective after March 31, 1998. This is a defined-contribution type pension plan up to the granting of the income, and generates no actuarial liability for CPFL Piratininga. The pension plan only becomes a Defined Benefit type plan after the granting of the lifetime income, convertible (or not) into a pension, and accordingly starts to generate actuarial liabilities for the subsidiary.

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Additionally, the subsidiary's Managers may opt for a Free Benefit Generator Plan – PGBL (defined contribution), operated by either Banco do Brasil or Bradesco.

RGE Sul (RGE)

The subsidiary RGE has retirement and pension plans for its employees and former employees managed by Fundação CEEE de Previdência Privada, comprising:

- (i) “Plan 1” (“Plano Único RGE”): A “defined benefit” plan with benefit level equal to 100% of the inflation adjusted average of the last salaries, deducting the presumed benefit from the Social Security, with a Segregated Net Asset. that is closed to new participants since 1997. This plan was recorded at the dissolved Rio Grande Energia S.A. until the merger of the distribution companies approved on December 31, 2018, as mentioned in note 14.5.1; and
- (ii) “Plan 2” (“Plano Único RGE”): A “defined benefit” plan that is closed to new participants since February 2011. The subsidiary's contribution matches the contribution from the benefitted employees, in the proportion of one for one, including as regards the Fundação's administrative funding plan.

For employees hired after the closing of the plans of Fundação CEEE, “defined contribution” private pension plans were implemented, being Bradesco Vida e Previdência for employees hired between 1997 and 2018 by the dissolved Rio Grande Energia S.A., and Itauprev for employees hired by RGE as from 2011, as well as for new employees to be hired after the event of merger of the distribution companies.

CPFL Santa Cruz

With the merger event mentioned in note 14.4.2, the company's official plan is the CMSPREV, managed by IHPREV Fundo de Pensão. The same plan was maintained for employees that had the benefits plan managed by BB Previdência - Fundo de Pensão from Banco do Brasil.

CPFL Geração

The employees of the subsidiary CPFL Geração participate in the same pension plan as CPFL Paulista. In addition, managers may opt for a Free Benefit Generator Plan – PGBL (defined contribution), operated by either Banco do Brasil or Bradesco.

18.2 Changes in the defined benefit plans

CPFL Paulista	CPFL Piratininga	December 31, 2018		Total
		CPFL Geração	RGE Sul (RGE) Plan 1 Plan 2	

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Present value of actuarial obligations	5,123,238	1,416,391	119,964	382,993	553,493	7,596,079
Fair value of plan's assets	(4,215,431)	(1,205,647)	(98,836)	(413,043)	(463,571)	(6,396,529)
Present value of net obligations (fair value of assets)	907,807	210,744	21,128	(30,050)	89,922	1,199,550
Effect of asset ceiling	-	-	-	30,050	-	30,050
Net actuarial liability recognized in the statement of financial position	907,807	210,744	21,128	-	89,922	1,229,600

	December 31, 2017					Total
	CPFL Paulista	CPFL Piratininga	CPFL Geração	RGE Plan 1 (*)	RGE Sul (RGE) Plan 2	
Present value of actuarial obligations	4,615,061	1,247,462	110,801	365,924	524,293	6,863,541
Fair value of plan's assets	(3,925,061)	(1,105,738)	(94,378)	(387,322)	(446,670)	(5,959,170)
Present value of net obligations (fair value of assets)	690,000	141,724	16,424	(21,399)	77,623	904,369
Effect of asset ceiling	-	-	-	21,399	-	21,399
Net actuarial liability recognized in the statement of financial position	690,000	141,724	16,424	-	77,623	925,768

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	December 31, 2016					Total
	CPFL Paulista	CPFL Piratininga	CPFL Geração	RGE Plan 1	RGE Sul (RGE) Plan 2	
Present value of actuarial obligations	4,524,008	1,202,596	108,486	352,879	480,081	6,668,050
Fair value of plan's assets	(3,723,563)	(1,062,638)	(89,533)	(347,906)	(405,251)	(5,628,892)
Net actuarial liability recognized in the statement of financial position	800,445	139,958	18,953	4,972	74,830	1,039,158

(*) Plan 1 was recorded at the dissolved RGE until the merger of the distribution companies, as mentioned in note 14.5.1.

The changes in the present value of the actuarial obligations and the fair value of the plan's assets are as follows:

	CPFL Paulista	CPFL Piratininga	CPFL Geração	RGE Sul (RGE)		Total
				Plan 1 (*)	Plan 2	
Present value of actuarial obligations at December 31, 2015	3,793,259	961,329	90,609	278,985	-	5,124,182
Business combination	-	-	-	-	474,710	474,710
Gross current service cost	828	3,242	76	59	365	4,570
Interest on actuarial obligations	467,872	121,158	11,184	35,211	8,469	643,894
Participants' contributions transferred during the year	59	2,020	-	319	165	2,563
Actuarial loss: effect of changes in demographic assumptions	-	-	-	3,602	-	3,602
Actuarial loss: effect of changes in financial assumptions	619,803	193,652	14,909	57,793	3,613	889,770
Benefits paid during the year	(357,813)	(78,805)	(8,292)	(23,090)	(7,241)	(475,241)
Present value of actuarial obligations at December 31, 2016	4,524,008	1,202,596	108,486	352,879	480,081	6,668,050
Gross current service cost	707	3,153	73	270	2,153	6,356
Interest on actuarial obligations	476,613	127,561	11,431	37,395	50,927	703,927
Participants' contributions transferred during the year	37	2,044	-	302	990	3,373
Actuarial loss: effect of changes in demographic assumptions	225	328	14	326	16,490	17,383
Actuarial loss: effect of changes in financial assumptions	(6,993)	(3,586)	(372)	(45)	8,153	(2,843)
Benefits paid during the year	(379,536)	(84,634)	(8,831)	(25,203)	(34,501)	(532,705)

Present value of actuarial obligations at December 31, 2017	4,615,061	1,247,462	110,801	365,924	524,293	6,863,541
Gross current service cost	835	4,365	78	175	2,790	8,243
Interest on actuarial obligations	421,083	114,628	10,109	33,552	48,218	627,590
Participants' contributions transferred during the year	24	2,078	-	395	842	3,339
Actuarial loss: effect of changes in demographic assumptions	-	-	-	-	345	345
Actuarial loss: effect of changes in financial assumptions	485,142	135,540	8,409	8,921	12,774	650,786
Benefits paid during the year	(398,907)	(87,682)	(9,433)	(25,974)	(35,769)	(557,765)
Present value of actuarial obligations at December 31, 2018	5,123,238	1,416,391	119,964	382,993	553,493	7,596,079

	CPFL Paulista	CPFL Piratinga	CPFL Geração	RGE Sul (RGE) Plan 1 (*)	RGE Sul (RGE) Plan 2	Total
Fair value of actuarial assets at December 31, 2015	(3,355,589)	(951,021)	(80,332)	(287,202)	-	(4,674,144)
Business combination	-	-	-	-	(415,621)	(415,621)
Expected return during the year	(404,183)	(115,607)	(9,582)	(35,632)	(7,470)	(572,474)
Participants' contributions transferred during the year	(59)	(2,020)	-	(319)	(165)	(2,563)
Sponsors' contributions	(48,263)	(13,405)	(843)	(9,441)	(1,437)	(73,389)
Actuarial loss (gain): return on assets	(273,282)	(59,390)	(7,068)	(38,403)	12,201	(365,942)
Benefits paid during the year	357,813	78,805	8,292	23,090	7,241	475,241
Fair value of actuarial assets at December 31, 2016	(3,723,563)	(1,062,638)	(89,533)	(347,906)	(405,251)	(5,628,892)
Expected return during the year	(392,819)	(113,470)	(9,437)	(37,412)	(43,258)	(596,396)
Participants' contributions transferred during the year	(37)	(2,044)	-	(302)	(990)	(3,373)
Sponsors' contributions	(50,308)	(17,296)	(753)	(7,296)	(6,169)	(81,822)
Actuarial loss (gain): return on assets	(137,870)	5,076	(3,486)	(19,610)	(25,503)	(181,393)
Benefits paid during the year	379,536	84,634	8,831	25,203	34,501	532,705
Fair value of actuarial assets at December 31, 2017	(3,925,061)	(1,105,738)	(94,378)	(387,323)	(446,670)	(5,959,171)
Expected return during the year	(359,588)	(102,621)	(8,634)	(35,950)	(41,166)	(547,959)
Participants' contributions transferred during the year	(24)	(2,078)	-	(395)	(842)	(3,339)

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Sponsors' contributions	(65,096)	(25,460)	(1,027)	(7,643)	(6,712)	(105,938)
Actuarial loss (gain): return on assets	(264,569)	(57,432)	(4,230)	(7,707)	(3,950)	(337,888)
Benefits paid during the year	398,907	87,682	9,433	25,974	35,769	557,765
Fair value of actuarial assets at December 31, 2018	(4,215,431)	(1,205,647)	(98,836)	(413,043)	(463,571)	(6,396,529)

(*) Plan 1 was recorded at the dissolved RGE until the merger of the distribution companies, as mentioned in note 14.5.1.

18.3 Changes in the recognized assets and liabilities

The changes in net liability are as follows:

	CPFL Paulista	CPFL Piratininga	CPFL Geração	RGE Plan 1	RGE Sul (RGE) Plan 2	Total
Net actuarial liability at December 31, 2015	437,670	10,308	10,277	-	-	458,255
Business combination	-	-	-	-	59,089	59,089
Expenses (income) recognized in the statement of profit or loss	64,514	8,791	1,677	158	1,364	76,505
Sponsors' contributions transferred during the year	(48,263)	(13,405)	(843)	(9,442)	(1,437)	(73,388)
Actuarial loss (gain): effect of changes in demographic assumptions	-	-	-	3,602	-	3,602
Actuarial loss (gain): effect of changes in financial assumptions	619,805	193,653	14,911	57,795	3,613	889,773
Actuarial loss (gain): return on assets	(273,282)	(59,390)	(7,068)	(38,403)	12,200	(365,939)
Effect of asset ceiling	-	-	-	(8,738)	-	(8,738)
Net actuarial liability at December 31, 2016	800,445	139,958	18,954	4,972	74,830	1,039,158
Other contributions						13,284
Total liability						1,052,442
Current						33,209
Noncurrent						1,019,233

	CPFL Paulista	CPFL Piratininga	CPFL Geração	RGE Plan 1	RGE Sul (RGE) Plan 2	Total
Net actuarial liability at December 31, 2016	800,445	139,958	18,954	4,972	74,830	1,039,158
Expenses (income) recognized in the statement of profit or loss	84,501	17,244	2,067	253	9,822	113,887
Sponsors' contributions transferred during the year	(50,308)	(17,296)	(753)	(7,296)	(6,169)	(81,822)
Actuarial loss (gain): effect of changes in demographic assumptions	225	328	14	326	16,490	17,383
Actuarial loss (gain): effect of changes in financial assumptions	(6,993)	(3,586)	(372)	(45)	8,153	(2,843)

Actuarial loss (gain): return on assets	(137,870)	5,076	(3,486)	(19,610)	(25,503)	(181,393)
Effect of asset ceiling	-	-	-	21,399	-	21,399
Net actuarial liability at December 31, 2017	690,000	141,724	16,424	-	77,623	925,768
Other contributions						15,391
Total liability						941,160
Current						60,801
Noncurrent						880,360

	CPFL Paulista	CPFL Piratininga	CPFL Geração	RGE Sul (RGE) Plan 1 (*)	RGE Sul (RGE) Plan 2	Total
Net actuarial liability at December 31, 2017	690,000	141,724	16,424	-	77,623	925,768
Expenses (income) recognized in the statement of profit or loss	62,330	16,372	1,553	(188)	9,842	89,909
Sponsors' contributions transferred during the year	(65,096)	(25,460)	(1,027)	(7,643)	(6,712)	(105,938)
Actuarial loss (gain): effect of changes in demographic assumptions	-	-	-	-	345	345
Actuarial loss (gain): effect of changes in financial assumptions	485,142	135,540	8,409	8,921	12,774	650,786
Actuarial loss (gain): return on actuarial assets	(264,569)	(57,432)	(4,230)	(7,707)	(3,950)	(337,888)
Effect of asset ceiling	-	-	-	6,617	-	6,617
Net actuarial liability at December 31, 2018	907,807	210,744	21,129	-	89,922	1,229,600
Other contributions						13,662
Total liability						1,243,263
Current						86,623
Noncurrent						1,156,639

(*) Plan 1 was recorded at the dissolved RGE until the merger of the distribution companies, as mentioned in note 14.5.1.

18.4 Expected contributions and benefits

The expected contributions to the plans for 2019 are shown below:

	2019
CPFL Paulista	122,135
CPFL Piratininga	39,924

a) IFRS 16 – Leases

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CPFL Geração	2,525
RGE Sul (RGE) - Plan 1	7,711
RGE Sul (RGE) - Plan 2	6,731
Total	179,026

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The expected benefits to be paid in the next 10 years are shown below:

	2019	2020	2021	2022	2023 to 2028	Total
CPFL Paulista	410,624	423,081	434,881	446,071	2,869,682	4,584,339
CPFL Piratininga	93,740	97,514	102,140	106,107	731,143	1,130,644
CPFL Geração	9,638	9,966	10,202	10,423	66,555	106,784
RGE Sul (RGE) - Plan 1	27,450	28,595	29,541	30,583	206,698	322,867
RGE Sul (RGE) - Plan 2	36,279	37,900	39,473	41,197	281,811	436,660
Total	577,731	597,056	616,237	634,381	4,155,889	6,581,294

At December 31, 2018, the average duration of the defined benefit obligation was 9.3 years for CPFL Paulista, 11.2 years for CPFL Piratininga, 9.5 years for CPFL Geração, 10.1 years for plan 1 for RGE and 11.2 years for plan 2 for RGE.

18.5 Private pension plan income and expense

Based on the opinion of external actuarial, the Group's management presents the estimate of the expenses (income) to be recognized in 2019 and the expense (income) recognized in 2018, 2017 and 2016 is as follows:

	2019 Estimated					Total
	CPFL Paulista	CPFL Piratininga	CPFL Geração	RGE Sul (RGE)		
				Plan 1	Plan 2	
Service cost	925	5,447	84	185	2,352	8,993
Interest on actuarial obligations	449,173	125,059	10,507	34,342	48,796	667,877
Expected return on plan assets	(372,121)	(107,795)	(8,699)	(37,500)	(40,947)	(567,062)
Effect of asset ceiling	-	-	-	2,795	-	2,795
Total expense (income)	77,977	22,711	1,892	(178)	10,201	112,603

	2018 Actual					Total
	CPFL Paulista	CPFL Piratininga	CPFL Geração	RGE Sul (RGE)		
				Plan 1 (*)	Plan 2	
Service cost	835	4,365	78	175	2,790	8,243
Interest on actuarial obligations	421,083	114,628	10,109	33,552	48,218	627,590
Expected return on plan assets	(359,588)	(102,621)	(8,634)	(35,950)	(41,166)	(547,959)
Effect of asset ceiling	-	-	-	2,035	-	2,035
Total expense (income)	62,330	16,372	1,553	(188)	9,842	89,909

(*) Plan 1 was recorded at the dissolved RGE until the merger of the distribution companies, as mentioned in note 14.5.1.

2017 Actual		Total
RGE	RGE Sul (RGE)	

	CPFL Paulista	CPFL Piratininga	CPFL Geração	Plan 1	Plan 2	
Service cost	707	3,153	73	270	2,153	6,356
Interest on actuarial obligations	476,613	127,561	11,431	37,395	50,927	703,927
Expected return on plan assets	(392,819)	(113,470)	(9,437)	(37,412)	(43,258)	(596,396)
Total expense (income)	84,501	17,244	2,067	253	9,822	113,887

	CPFL Paulista	CPFL Piratininga	CPFL Geração	2016 Actual RGE Plan 1	RGE Sul (RGE) Plan 2 (**)	Total
Service cost	828	3,242	76	59	365	4,570
Interest on actuarial obligations	467,872	121,158	11,184	35,211	8,469	643,894
Expected return on plan assets	(404,184)	(115,608)	(9,582)	(35,632)	(7,470)	(572,476)
Effect of asset ceiling	-	-	-	520	-	520
Total expense (income)	64,514	8,791	1,677	158	1,364	76,505

(**) The expenses and income presented for RGE Sul are related to November and December 2016

The main assumptions taken into consideration in the actuarial calculation at the end of the reporting period were as follows:

	CPFL Paulista, CPFL Geração and CPFL Piratininga			RGE Sul (RGE)
	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2018
Nominal discount rate for actuarial liabilities:	9.10% p.a.	9.51% p.a.	10.99% p.a.	9.30% p.a.
Nominal Return Rate on Assets:	9.10% p.a.	9.51% p.a.	10.99% p.a.	9.30% p.a.
Estimated Rate of nominal salary increase:	5.56% p.a. *	6.08% p.a.*	7.00% p.a.	6.13% p.a.
Estimated Rate of nominal benefits increase:	4.00% p.a.	4.00% p.a.	5.00% p.a.	4.00% p.a.
Estimated long-term inflation rate (basis for determining the nominal rates above)	4.00% p.a.	4.00% p.a.	5.00% p.a.	4.00% p.a.
General biometric mortality table:	AT-2000 (-10)	AT-2000 (-10)	AT-2000 (-10)	BR-EMS sb v.2015
Biometric table for the onset of disability:	Low Light	Low Light	Low Light	Medium Light
Expected turnover rate:	ExpR_2012	ExpR_2012	ExpR_2012**	Null
Likelihood of reaching retirement age:	(a)	(b)	(b)	(b)

(*) Estimated rate of nominal salary increase for CPFL Piratininga was 6.39% on December 31, 2018 and 2017.

(**) FUNCESP experience, with aggravation of 40%.

(a) After 15 years of filiation and 35 years of service time for men and 30 years of service time for women

(b) 100% when a beneficiary of the plan first becomes eligible

(c) 100% one year after when a beneficiary of the plan first becomes eligible

18.6 Plan assets

The following tables show the allocation (by asset segment) of the assets of the CPFL's Group pension plans, at December 31, 2018 and 2017 managed by FUNCESP and Fundação CEEE. The tables also show the distribution of the guarantee resources established as target for 2019, obtained in light of the macroeconomic scenario in December 2018.

Assets managed by the plans are as follows:

	Assets managed by FUNCESP				Assets managed by Fundação CEEE	
	CPFL Paulista and CPFL Geração		CPFL Piratininga		Plan 1	
	2018	2017	2018	2017	2018	2017
Fixed rate	77%	77%	81%	80%	78%	78%
Federal government bonds	55%	53%	53%	49%	68%	68%
Corporate bonds (financial institutions)	3%	4%	5%	7%	5%	5%
Corporate bonds (non financial institutions)	1%	1%	1%	1%	3%	3%
Multimarket funds	4%	2%	4%	2%	2%	2%
Other fixed income investments	15%	17%	18%	22%	-	-
Variable income	15%	15%	14%	14%	18%	18%
Investment funds - shares	15%	15%	13%	14%	18%	18%
Structured investments	2%	3%	2%	3%	1%	1%

Equity funds	-	-	-	-	0%
Real estate funds	-	-	-	-	1%
Multimarket fund	2%	3%	2%	3%	-
Total quoted in an active market	94%	94%	97%	97%	96%
Real estate	3%	3%	2%	2%	2%
Transactions with participants	1%	1%	2%	2%	2%
Other investments	1%	1%	-	-	-
Total not quoted in an active market	6%	6%	3%	3%	4%

The plan assets do not hold any properties occupied or assets used by the Company.

	Target for 2019			
	FUNCESP		Fundação CEEE RGE Sul (RGE)	
	CPFL Paulista and CPFL Geração	CPFL Piratininga	Plan 1	Plan 2
	Fixed income investments	70.9%	72.8%	78.0%
Variable income investments	9.6%	8.9%	16.0%	16.0%
Real estate	4.6%	2.3%	3.0%	3.0%
Transactions with participants	2.1%	2.9%	2.0%	3.0%
Structured investments	5.8%	6.0%	1.0%	1.0%
Investments abroad	7.0%	7.2%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%

The allocation target for 2019 was based on the recommendations for allocation of assets made at the end of 2018 by FUNCESP and Fundação CEEE, in their Investment Policy. This target may change at any time during 2019, in light of changes in the macroeconomic situation or in the return on assets, among other factors.

The asset management aims at maximizing the return on investments, but always seeking to minimize the risks of actuarial deficit. Accordingly, investments are always made considering the liability that they must honor. The two main studies for Funcesp and Fundação CEEE to achieve the investment management objectives are the Asset Liability Management – ALM and the Technical Study of Compliance and Appropriateness of the Real Interest Rate, both conducted at least once a year, taking into consideration the projected flow of benefit payments (liability flow) of the pension plans managed by the Foundations.

The ALM study is used as a base to define the strategic allocation of assets, which comprises the target participations in the asset classes of interest, from the identification of efficient combinations of assets, considering the existence of liabilities and the need for return, immunization and liquidity of each plan, considering projections of risk and return. The simulations generated by the ALM studies assist in the definition of the minimum and maximum limits of allocation in the different asset classes, defined in the plans' Investment Policy, which is also used as a risk control mechanism.

The Technical Study of Compliance and Appropriateness of the Real Interest Rate aims at proving the appropriateness and compliance of the annual real interest rate to be adopted in the actuarial valuation of the plans and the projected annual real rate of return of the investments, considering their projected flows of revenues and expenses.

These studies are used as a base to determine the assumptions of estimated real return of the pension plans' investments for short-term and long-term horizons and assist in the analysis of their liquidity, since they consider the flow of benefit payments against the assets considered liquid. The main assumptions considered in the studies are, in addition to the liability flow projections, the macroeconomic and asset price projections, through which estimates of the expected short-term and long-term profitability are obtained, taking into account the current portfolios of the benefit plans.

18.7 Sensitivity analysis

The significant actuarial assumptions for determining the defined benefit obligation are discount rate and mortality. The following sensitivity analyses were based on reasonably possible changes in the assumptions at the end of the reporting period, with the other assumptions remaining constant.

Furthermore, in the presentation of the sensitivity analysis, the present value of the defined benefit obligation was calculated using the projected unit credit method at the end of the reporting period, the same method used to calculate the defined benefit obligation recognized in the statement of financial position, according to IAS 19.

See below the effects on the defined benefit obligation if the discount rate were 0.25 percentage points lower (higher) and if life expectancy were to decrease (increase) in one year:

	Increase (Decrease)	CPFL Paulista	CPFL Piratininga	CPFL Geração	RGE Sul (RGE) Plan 1 Plan 2		Total
Nominal discount (p.a.)*	-0.25 p.p.	120,829	40,114	2,889	9,833	15,681	189,347
	+0.25 p.p.	(115,987)	(38,248)	(2,768)	(9,411)	(14,945)	(181,359)

General biometric mortality table**	+1 year	(119,802)	(26,753)	(2,718)	(5,313)	(10,617)	(165,202)
	-1 year	118,129	26,122	2,684	5,257	10,359	162,551

* The Company's assumption based on the actuarial report for the nominal discount rate was 9.3% p.a. for the Plan 1 and 9.1% for the other companies. The projected rates are increased or decreased by 0.25 p.p. to 9.05% p.a. and 9.55% p.a. to the Plan 1 and 8.85% p.a. and 9.35% p.a. for the other plans.

** The Company's assumption based on in the actuarial report for the mortality table was AT-2000 (-10) for FUNCESP and BREMS sb v.2015 for Fundação CEEE. The projections were performed with 1 year of aggravation or softening on the respective mortality tables.

18.8 Investment risk

The major part of the resources of the Company's benefit plans is invested in the fixed income segment and, within this segment, the greater part of the funds is invested in federal government bonds, indexed to the IGP-M, IPCA and SELIC, which are the indexes for adjustment of the actuarial liabilities of the Company's plans (defined benefit plans), representing the matching between assets and liabilities.

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Management of the Company's benefit plans is monitored by the Investment and Pension Plan Management Committee, which includes representatives of active and retired employees, as well as members appointed by the Company. Among the duties of the Committee are the analysis and approval of investment recommendations made by investment managers of FUNCESP, which occurs at least quarterly.

FUNCESP and Fundação CEEE use the following tools to control market risks in the fixed income and variable income segments: VaR, Tracking Risk, Tracking Error and Stress Test.

The Investment Policies of FUNCESP and Fundação CEEE determine additional restrictions that, along those established by law, define the percentage of diversification for investments and establish the strategy of the plans, including the credit risk limit in assets issued or underwritten by the same legal entity.

(19) REGULATORY CHARGES

	Dec 31, 2018	Dec 31, 2017
Fee for the use of water resources	1,701	1,256
Global reversal reserve - RGR	17,288	17,545
ANEEL inspection fee - TFSEE	5,470	2,061
Energy development account - CDE	-	262,213
Tariff flags and others	126,196	298,525
Total	150,656	581,600

Tariff flags and others: refer basically to the amount to be passed on to the Centralizing Account for Tariff Flag Resources ("CCRBT"), the related amount receivable was recognized through the issuance of electricity bills (note 25.4).

Energy development account – CDE: the balances as of December 31, 2017 refer to the: (i) annual CDE quota in the amount of R\$138,135; (ii) quota intended for the reimbursement of the CDE injection for the period from January 2013 to January 2014 in the amount of R\$ 47,429; and (iii) quota intended for the reimbursement of the injection into the Regulated Contracting Environment (ACR account) for the period from February to December 2014, in the amount of R\$76,649. In 2018, the subsidiaries conducted an advance payment of CDE quotes as of December 31, 2018 and also the matching of accounts between the amount of CDE payable and the Accounts Receivable – CDE (note 11), in the amount of R\$ 2,875.

(20) TAXES, FEES AND CONTRIBUTIONS PAYABLE

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	Dec 31, 2018	Dec 31, 2017
Current		
IRPJ (corporate income tax)	73,058	59,026
CSLL (social contribution on net income)	27,392	22,430
Income tax and social contribution	100,450	81,457
ICMS (State VAT)	430,149	403,492
PIS (tax on revenue)	30,760	32,486
COFINS (tax on revenue)	152,945	141,757
Income tax withholding on interest on capital	7,909	-
Others	43,225	51,111
Other taxes	664,989	628,846
Total current	765,438	710,303
Noncurrent		
ICMS (State VAT)	772	-
PIS (tax on revenue)	-	18,839
PIS/COFINS payment	8,919	-
Other taxes	9,691	18,839
Total noncurrent	9,691	18,839

(21) PROVISION FOR TAX, CIVIL AND LABOR RISKS AND ESCROW DEPOSITS

	December 31, 2018		December 31, 2017	
	Provision for tax, civil and labor risks	Escrow Deposits	Provision for tax, civil and labor risks	Escrow Deposits
Labor	219,314	103,760	224,258	122,194
Civil	281,304	99,604	291,388	97,100
Tax				
FINSOCIAL	39,727	99,146	33,473	95,903
Income Tax	154,717	401,381	150,020	382,884
Others	195,379	150,472	163,798	140,289
	389,823	650,999	347,291	619,077
Others	88,920	12	98,196	1,620
Total	979,360	854,374	961,134	839,990

The changes in the provision for tax, civil, labor and other risks are shown below:

	December 31, 2017	Additions	Reversals	Payments	Monetary adjustment	December 31, 2018
Labor	224,258	85,081	(42,869)	(79,369)	32,212	219,314
Civil	291,388	122,626	(51,944)	(111,404)	30,638	281,304
Tax	347,291	53,407	(31,414)	(8,078)	28,617	389,823
Others	98,196	23,753	(20,562)	(17,022)	4,551	88,920
Total	961,134	284,867	(146,789)	(215,873)	96,018	979,360

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The provision for tax, civil, labor and other risks was based on the assessment of the risks of losing the lawsuits to which the Company and its subsidiaries are parties, where the likelihood of loss is probable in the opinion of the outside legal counselors and the Management of the Group.

The principal pending issues relating to litigation, lawsuits and tax assessments are summarized below:

a) **Labor:** The main labor lawsuits relate to claims filed by former employees or labor unions for payment of salary adjustments (overtime, salary parity, severance payments and other claims).

b) **Civil**

Bodily injury – refer mainly to claims for indemnities relating to accidents in the Company's electrical grids, damage to consumers, vehicle accidents, etc.

Tariff increase – refer to various claims by industrial consumers as a result of tariff increases imposed by DNAEE Administrative Rules 38 and 45, of February 27 and March 4, 1986, when the “Plano Cruzado” economic plan price freeze was in effect.

c) **Tax**

FINSOCIAL– refer to legal challenges of the subsidiary CPFL Paulista of the rate increase and collection of FINSOCIAL. The subsidiary CPFL Paulista filed a termination action to discuss the decision issued in an ordinary suit on the lawfulness of the collection of the increases in FINSOCIAL rates from June 1989 to October 1991, which were declared unconstitutional by the Supreme Federal Court (STF) for companies that are not exclusively providers of services, situation in which the subsidiary is classified, and that therefore the collection should be made at the rate of 0.5%.

At the time the ordinary action was filed, the subsidiary made a full judicial deposit of the FINSOCIAL amount considered due (0.5%) and the increases in its rates (rates of 1%, 1.2% and 2%).

After the final decision of the STF in regard to the termination action of the subsidiary, it was decided that the subsidiary should return to the lower court to prove its condition of seller of goods. Thus, the subsidiary submitted a claim requiring its recognition as such and, consequently, the withdrawal of the judicial deposit on its behalf, in respect of the amount of the increase in rates (amount that exceeds 0.5%). As at December 31, 2018, this claim is pending analysis by the court authorities.

The outside legal counsel and Management classify as (i) probable the likelihood of loss in regard to the deposited amount related to the rate of 0.5%, of R\$ 39,727 as at December 31, 2018 and (ii) possible the likelihood of loss in connection with the amount related to the increase in rates of R\$ 59,419.

Income Tax – the provision of R\$151,811 (R\$147,100 at December 31, 2017) recognized by the subsidiary CPFL Piratinga refers to the lawsuit for tax deductibility of CSLL in the determination of corporate income tax - IRPJ.

Other Tax – refer to other lawsuits in progress at the judicial and administrative levels resulting from the subsidiaries' operations, related to tax matters involving INSS, FGTS, SAT and Pis and Cofins.

With regard to Pis and Cofins, the subsidiaries filed a lawsuit to discuss the application of Decree No. 8,426/15, which increased the respective rates levied on finance income from 0% to 4.65%. Having its preliminary injunction to suspend the collection of such taxes accepted, some Group's companies have since then accrued the amounts that were not paid to the Brazilian Federal Revenue in view of the injunction. As at December 31, 2018, the balance related to this lawsuit is R\$ 157,520.

d) **Others:** The line item of "others" refers mainly to lawsuits involving regulatory matters.

Possible losses

The Group is party to other lawsuits in which Management, supported by its external legal counselors, believes that the chances of a successful outcome are possible, in compliance with IAS 37, due to a solid defensive position in these cases, therefore no provision was registered. It is not yet possible to predict the outcome of the courts' decisions or any other decisions in similar proceedings considered probable or remote.

The claims relating to possible losses, at December 31, 2018 and 2017, were as follows:

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	Dec 31, 2018	Dec 31, 2017	Main reasons for claims
Labor	786,901	686,538	Work accidents, risk premium for dangerousness at workplace and overtime
Civil	1,630,630	1,178,671	Personal injury, environmental impacts and overfed tariffs
Tax	6,199,589	5,100,151	ICMS, FINSOCIAL, PIS, COFINS, Social Contributions and Income tax
Regulatory	139,593	140,695	Technical, commercial and economic-financial supervisions
Total	8,756,713	7,106,055	

(a) Tax:

(i) there is a discussion relating to the deductibility for income tax expense recognized in 1997 relating to the commitment assumed in regard to the pension plan of employees of subsidiary CPFL Paulista with Fundação CESP in the estimated amount of R\$ 1,226,965, with escrow deposit related of R\$ 206,874 and financial guarantees (letter of guarantee and performance bond);

(ii) In August 2016, the subsidiary CPFL Renováveis received a tax legal proceeding notice in the amount of R\$ 327,547 relating to the collection of Withholding Income Tax - IRRF on remuneration of capital gain incurred by parties resident and/or domiciled abroad, arising from the transaction of sale of Jantus SL, in December 2011, which the Company's management, supported by the opinion of its outside legal counselors, classified the likelihood of a favorable outcome as possible.

(iii) In 2016, the subsidiary CPFL Geração received a tax legal proceeding notice that, summed up and updated, total R\$ 414,470 relating to the collection of Corporate Income Tax - IRPJ and Social Contribution on Profit – CSLL relating to calendar year 2011, calculated on the alleged capital gain identified on the acquisition of ERSA Energias Renováveis S.A. and recording of differences from the fair value remeasurement of SMITA Empreendimentos e Participações S.A., company acquired in a downstream merger, which the Company's management, supported by its outside legal counselors, classified the likelihood of a favorable outcome as possible.

(b) Labor:

As regards to labor contingencies, there is discussion about the possibility of changing the inflation adjustment index adopted by the Labor Court. Currently there is a decision of the Federal Supreme Court (STF) that suspends the change taken into effect by the Superior Labor Court (TST), which intended to change the index currently adopted by the Labor Court ("TR"), the IPCA-E. The Supreme Court considered that the TST's decision entailed an unlawful interpretation and was not compliant with the determination of the effects of prior court decisions, violating its competence to decide on a constitutional matter. In view of such decision, and until there is a final decision by the STF, the index currently adopted by the Labor Court ("TR") remains valid, which has been acknowledged by the TST (Superior Labor Court) in recent decisions. Accordingly, the management of the Group considers the risk of loss as possible and, as this matter still requires definition by the Courts, it is not possible to reliably estimate the amounts involved. Furthermore, in accordance with Law 13,467/17, of November 11, 2017, TR is the index for inflation adjustment used by the Labor Court since the date the law became effective.

Based on the opinion of their external legal advisers, Management of the Group and its subsidiaries consider that the registered amounts represent best estimate.

(22) OTHER PAYABLES

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	Current		Noncurrent	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Consumers and concessionaires	93,612	93,068	47,831	44,473
Energy efficiency program - PEE	183,225	186,621	120,563	110,931
Research & Development - P&D	110,495	103,308	72,941	68,780
EPE/FNDCT/PROCEL (*)	38,052	15,612	-	-
Reversion fund	1,712	-	14,327	17,750
Advances	197,470	300,214	48,724	22,255
Tariff discounts - CDE	96,819	25,040	-	-
Provision for socio environmental costs	22,709	16,360	110,261	107,814
Payroll	15,674	20,747	-	-
Profit sharing	95,502	80,518	20,575	16,273
Collections agreement	85,018	72,483	-	-
Guarantees	-	-	5,515	5,959
Business combination	7,598	6,927	-	-
Others	31,410	40,408	34,659	32,654
Total	979,296	961,306	475,396	426,889

(*) EPE – Energy Research Company;

FNDCT - National Fund for Scientific Development;

PROCEL - National Electricity Conservation Program.

Consumers and concessionaires: refer to liabilities with consumers in connection with bills paid twice and adjustments of billing to be offset or returned to consumers as well the participation of consumers in the “Programa de Universalização” program.

Research & Development and Energy Efficiency Programs: the subsidiaries recognized liabilities relating to amounts already billed in tariffs (1% of net operating revenue), but not yet invested in the research & development and energy efficiency programs. These amounts are subject to adjustment for SELIC rate, through the date of their realization.

Advances: refer mainly to advances from customers in relation to advance billing by the subsidiary CPFL Renováveis, before the energy or service has actually been provided or delivered.

Provision for socio environmental costs and asset retirement: refers mainly to provisions recognized by the subsidiary CPFL Renováveis in relation to socio environmental licenses as a result of events that have already occurred and obligations to remove assets arising from contractual and legal requirements related to leasing of land on which the wind farms are located. Such costs are accrued against property, plant and equipment and will be depreciated over the remaining useful life of the asset.

Tariff discounts – CDE: refers to the difference between the tariff discount granted to consumers and the amounts received via the CDE.

Profit sharing: mainly comprised by:

- (i) in accordance with a collective labor agreement, the Group introduced an employee profit-sharing program, based on the achievement of operating and financial targets previously established;
- (ii) Long-Term Incentive Program: refers to the Long-Term Incentive Plan for the Group's Executives, approved by the Board of Directors, which consists in an incentive in financial resources based on salary multiples and that are driven by the company's results and average performance in the three fiscal years after each concession.

(23) EQUITY

The shareholders' interest in the Company's equity at December 31, 2018 and 2017 is shown below:

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	Number of shares			
	December 31, 2018		December 31, 2017	
	Common shares	Interest %	Common shares	Interest %
Shareholders				
State Grid Brazil Power Participações S.A.	730,435,698	71.76%	730,435,698	71.76%
ESC Energia S.A.	234,086,204	23.00%	234,086,204	23.00%
Members of the Executive Board	189	0.00%	189	0.00%
Other shareholders	53,392,655	5.25%	53,392,655	5.25%
Total	1,017,914,746	100.00%	1,017,914,746	100.00%

23.1 Changes in shareholding structure and Mandatory Tender Offer (MTO)

In January, 2017, the Share Purchase Agreement between State Grid Brazil, Camargo Corrêa S.A., Caixa de Previdência dos Funcionários do Banco do Brasil – PREVI, Fundação CESP, Fundação Sistel de Seguridade Social, Fundação Petrobras de Seguridade Social – PETROS, Fundação SABESP de Seguridade Social — SABESPREV, and certain other parties, had been signed. After finalizing the transaction, State Grid Brazil became the parent company of CPFL Energia with 54.64% of the Company's voting and total capital.

In November, 2017, it had successfully conducted the public offering auction on the trading system of B3 ("Auction"). As a result of the auction, State Grid Brazil acquired 408,357,085 common shares of the Company, representing 88.44% of the total shares object of the Public Offering and 40.12% of the Company's capital. The common shares were acquired for the price of R\$ 27.69, totaling R\$ 11,307,408. State Grid Brazil started holding, jointly with ESC Energia S.A., 964,521,902 common shares of the Company, increasing its joint interest from 54.64% to 94.75% of the Company's total capital.

According to B3 regulation, after incurred the period of the 18 months from November 30, 2017 it is required the Company to take a decision of reestablish the minimum floating required or delist its shares from the public stock market.

On April 2, 2019, the Company informed the B3 its intention to bring its free float in compliance with *Novo Mercado* rules by carrying out a follow-on offering for its common shares, and on April 18, 2019, B3 approved its request for an extension of the deadline to reach a minimum free float of 15% of its total capital until October 31, 2019. The Company is still considering the terms and conditions of any potential follow-on offering.

23.2 Capital reserves

Refer basically to: (i) R\$ 228,322 related to the CPFL Renováveis business combination in 2011, (ii) effect of the public offer of shares, in 2013, of the subsidiary CPFL Renováveis amounting to R\$ 59,308, as a result of the reduction of the indirect interest in CPFL Renováveis, (iii) effect of the acquisition of DESA, amounting to R\$ 180,297 in 2014, and (iv) other movements with no change of control amounting to R\$1,243. In accordance with IFRS 10, these effects were recognized as transactions between shareholders, directly in Equity.

23.3 Earnings reserves

The balance of earnings reserve at December 31, 2018 is R\$ 4,428,503 that refers to: i) Legal Reserve of R\$ 900,992; and ii) statutory reserve - working capital improvement of R\$ 3,527,511.

23.4 Accumulated other comprehensive income

The accumulated other comprehensive income is comprised of:

- i. Deemed cost: refers to the recognition of the fair value adjustments of the deemed cost of the generating plants' property, plant and equipment, of R\$ 380,721;
- ii. Private pension plan: The debt balance of R\$809,126 (net of taxes) refers to the effects of the actuarial gains and losses recognized directly in other comprehensive income, in accordance with IAS 19.
- iii. Effects of the credit risk in the mark to market of financial liabilities, net of income taxes, in accordance with IFRS 9 (credit amount of R\$ 52,109).

23.5 Dividends

At the Extraordinary Shareholders' Meeting held on April 27, 2018 approval was given for the declaration dividend for 2017 in the amount of R\$ 280,191.

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Furthermore, in 2018 the Company proposed R\$ 488,785 of minimum mandatory dividend, as set forth by Law 6,404/76, and for each share the amount of R\$ 0.480182232 was attributed.

In 2018, the Company paid R\$ 279,101 relating to the dividend for 2018.

23.6 Termination of the statutory reserve of the financial asset of concession

The Extraordinary Shareholders' Meeting held on April 27, 2018 approved the extinction of the statutory reserve of the financial asset of concession and the transfer of the respective balance of R\$ 826,600 to the Retained Earnings account.

23.7 Allocation of profit for the year

The Company's bylaws assure shareholders a minimum dividend of 25% of profit for the year, adjusted in accordance with the law.

The proposed allocation of profit for the year is shown below:

	2018
Profit for the year - Parent company	2,058,040
Realization of comprehensive income	25,117
Adjustment of previous period - Adoption IFRS 9	(82,607)
Statutory reserve - concession financial asset - reversal	826,600
Profit base for allocation	2,827,151
Legal reserve	(102,902)
Statutory reserve - working capital improvement	(2,235,465)
Mandatory dividend	(488,785)
Additional dividend	-

For this year, considering the current scenario with the incipient economic recovery and also considering the uncertainties regarding the hydrology, the Company's management is proposing the allocation of R\$2,235,465 to the statutory reserve - working capital reinforcement.

23.8 Noncontrolling interests and joint ventures

The disclosure of interests in subsidiaries, in accordance with IFRS 12, is as follows:

23.8.1 Changes in noncontrolling interests

	CERAN	CPFL Renováveis	Paulista Lajeado	Total
As of December 31, 2015	234,271	2,148,490	73,182	2,455,942
Equity interests and voting capital	35.00%	48.39%	40.07%	
Equity attributable to noncontrolling interests	38,621	(65,311)	4,862	(21,828)
Dividends	(9,172)	(22,751)	1,096	(30,827)
Other movements	-	535	(1,176)	(641)
As of December 31, 2016	263,719	2,060,963	77,966	2,402,648
Equity interests and voting capital	35.00%	48.40%	40.07%	
Equity attributable to noncontrolling interests	37,949	13,720	11,623	63,292
Dividends	(92,832)	(16,619)	(8,769)	(118,220)
Capital increase (reduction)	(122,806)	15	-	(122,791)
Other movements	-	-	(113)	(113)
As of December 31, 2017	86,031	2,058,079	80,707	2,224,816
Equity interests and voting capital	35.00%	48.40%	40.07%	
Equity attributable to noncontrolling interests	34,731	62,470	10,754	107,955
Dividends	(44,314)	(13,511)	(10,860)	(68,685)
Other movements	-	5,656	(108)	5,548
As of December 31, 2018	76,448	2,112,693	80,493	2,269,634
Equity interests and voting capital	35.00%	48.44%	40.07%	

23.8.2 Summarized financial information of subsidiaries that have interests of noncontrolling shareholders

The summarized financial information on subsidiaries in which there is noncontrolling interests at December 31, 2018 and 2017, and for income statement for the years ended December 31, 2018, 2017 and 2016 are as follows:

	December 31, 2018		
	CERAN	CPFL Renováveis	Paulista Lajeado
Current assets	80,367	1,330,819	15,499
Cash and cash equivalents	32,729	876,571	5,687
Noncurrent assets	799,390	10,845,036	144,863
Current liabilities	246,482	1,396,120	33,883
Borrowings and debentures	106,555	819,993	-
Other financial liabilities	13,406	7,671	282
Noncurrent liabilities	414,852	6,528,563	1,033
Borrowings and debentures	316,581	4,738,841	-
Other financial liabilities	89,965	-	-
Equity	218,423	4,251,172	125,446

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Attributable to owners of the Company	218,423	4,147,795	125,446
Attributable to noncontrolling interests	-	103,377	-
		2018	
Net operating revenue	333,289	1,936,319	52,510
Operational costs and expenses	(95,321)	(727,557)	(26,115)
Depreciation and amortization	(41,378)	(623,106)	(4)
Interest income	6,191	93,076	691
Interest expense	(53,629)	(517,403)	(614)
Income tax expense	(48,239)	37,276	(3,145)
Profit (loss) for the year	99,230	118,805	26,838
Attributable to owners of the Company	99,230	109,264	26,838
Attributable to noncontrolling interests	-	9,542	-

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	December 31, 2017		
	CERAN	CPFL Renováveis	Paulista Lajeado
Current assets	110,566	1,623,645	48,037
Cash and cash equivalents	37,043	950,215	24,086
Noncurrent assets	848,445	11,232,357	120,677
Current liabilities	198,624	1,957,000	42,525
Borrowings and debentures	105,844	1,259,105	36,453
Other financial liabilities	12,360	7,258	264
Noncurrent liabilities	514,583	6,760,025	258
Borrowings and debentures	422,166	5,251,704	-
Other financial liabilities	83,766	-	-
Equity	245,804	4,138,977	125,931
Attributable to owners of the Company	245,804	4,032,448	125,931
Attributable to noncontrolling interests	-	106,529	-
		2017	
Net operating revenue	321,743	1,959,084	38,278
Operational costs and expenses	(103,671)	(737,472)	(10,565)
Depreciation and amortization	(45,212)	(617,017)	(4)
Interest income	30,489	126,041	2,089
Interest expense	(40,202)	(648,571)	(4,050)
Income tax expense	(54,099)	(74,125)	(2,911)
Profit (loss) for the year	108,427	19,645	29,006
Attributable to owners of the Company	108,427	11,484	29,006
Attributable to noncontrolling interests	-	8,162	-
		2016	
	CERAN	CPFL Renováveis	Paulista Lajeado
Net operating revenue	301,179	1,646,589	30,820
Operational costs and expenses	(67,242)	(653,459)	(27,404)
Depreciation and amortization	(48,082)	(553,169)	(3)
Interest income	28,232	112,389	2,728
Interest expense	(36,485)	(591,626)	(1,383)
Income tax expense	(55,596)	(46,311)	(1,137)
Profit (loss) for the year	110,345	(143,706)	12,134
Attributable to owners of the Company	110,345	(151,900)	12,134
Attributable to noncontrolling interests	-	8,195	-

(24) EARNINGS PER SHARE**Earnings per share – basic and diluted**

The calculation of the basic and diluted earnings per share at December 31, 2018, 2017 and 2016 was based on the profit for the year attributable to controlling shareholders and the weighted average number of common shares outstanding during the reporting years. For diluted earnings per share, the calculation considered the dilutive effects of instruments convertible into shares, as shown below:

	2018	2017	2016
Numerator			
Profit attributable to controlling shareholders	2,058,040	1,179,750	900,885
Denominator			
Weighted average number of shares held by shareholders	1,017,914,746	1,017,914,746	1,017,914,746(*)
Earnings per share - basic	2.02	1.16	0.89

Numerator			
Profit attributable to controlling shareholders	2,058,040	1,179,750	900,885
Dilutive effect of convertible debentures of subsidiary CPFL Renováveis (**)	(7,525)	(11,966)	(16,153)
Profit attributable to controlling shareholders	2,050,515	1,167,784	884,731

Denominator			
Weighted average number of shares held by shareholders	1,017,914,746	1,017,914,746	1,017,914,746(*)
Earnings per share - diluted	2.01	1.15	0.87

(*) Considers the event that occurred on April 29, 2016, related to the capital increase through issue of 24,900,531 shares as bonus. In accordance with IAS 33, when there is an increase in the number of shares without an increase in resources, the number of shares is adjusted as if the event had occurred at the beginning of the oldest period presented.

(**)The dilutive effect of the numerator in the calculation of diluted earnings per share considers the dilutive effects of the debentures convertible into shares issued by subsidiaries of the indirect subsidiary CPFL Renováveis. The effects were calculated based on the assumption that these debentures would be converted into common shares of the subsidiaries at the beginning of each year.

(25) NET OPERATING REVENUE

Revenue from Electric Energy Operations Consumer class	Number of Consumers			In GWh			2016
	2018	2017	2016 (*)	2018	2017	2016 (*)	
Residential	8,544,035	8,330,237	8,174,700	19,618	19,122	16,473	13,54
Industrial	58,241	59,825	61,112	13,834	14,661	13,022	5,18
Commercial	532,592	545,095	551,171	10,211	10,220	9,720	6,03
Rural	361,908	359,106	355,586	3,583	3,762	2,474	1,33
Public administration	60,685	60,639	61,208	1,459	1,456	1,271	87
Public lighting	11,659	11,230	11,073	2,003	1,964	1,746	76
Public services	10,194	9,790	9,649	2,348	2,157	1,840	1,15
	-	-	-	-	-	-	-

(-) Adjustment of revenues from excess demand and excess reactive power							
Billed	9,579,314	9,375,922	9,224,499	53,057	53,342	46,546	28,900
Own consumption	-	-	-	34	34	32	
Unbilled (net)	-	-	-	-	-	-	11,090
(-) Transfer or revenue related to the network availability for Captive Consumers	-	-	-	-	-	-	(11,090)
Electricity sales to final consumers	9,579,314	9,375,922	9,224,499	53,091	53,376	46,578	17,920
Furnas Centrais Elétricas S.A.				2,875	3,026	3,034	5,400
Other concessionaires and licensees				17,757	16,337	12,252	3,820
(-) Transfer or revenue related to the network availability for Captive Consumers				-	-	-	(9,000)
Spot market energy				3,828	8,194	6,173	1,080
Electricity sales to wholesalers				24,459	27,557	21,459	5,330
Revenue due to Network Usage Charge - TUSD - Captive Consumers							11,190
Revenue due to Network Usage Charge - TUSD - Free Consumers							2,650
(-) Compensation paid for failure to comply with the limits of continuity							(5,000)
(-) Adjustment of revenues from excess demand and excess reactive power							
Revenue from construction of concession infrastructure							1,770
Sector financial asset and liability (Note 8)							1,200
Concession financial asset - Adjustment of expected cash flow (note 10)							340
Energy development account - CDE - Low-income, tariff discounts - judicial injunctions and other tariff discounts							1,530
Other revenues and income							690
Other operating revenues							19,340
Total gross operating revenue							42,620
Deductions from operating revenue							
ICMS							(6,180)
PIS							(650)
COFINS							(3,030)
ISS							(1,000)
Global reversal reserve - RGR							
Energy development account - CDE							(4,010)
Research and development and energy efficiency programs							(200)
PROINFA							(150)
Tariff flags and others							(170)
Others							(3,000)
							(14,480)
Net operating revenue							28,140

(*) Information not audited by the independent auditors

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25.1 Adjustment of revenues from excess demand and excess reactive power

As provided for in Sub-module 2.1 of the Tariff Regulation Procedures – PRORET, approved through Normative Resolution No. 457/2011 and Decision No. 245/2016, since the 4th cycle of period tariff review of the distribution subsidiaries, the revenues earned from excess demand and excess reactive power have been recorded as sector liability. Since May 2015 for subsidiary CPFL Piratininga, September 2015 for subsidiary Companhia Jaguari de Energia (“CPFL Santa Cruz”), November 2017 for subsidiaries CPFL Paulista and RGE Sul, and January 2018 for subsidiary RGE due to the 4th cycle of periodic tariff review, this special obligation started being amortized and the new values from the excess demand and excess reagents started being recognized in sector financial assets and liabilities and the recorded amounts will be amortized as from the 5th cycle, when they will be deducted from Portion B (portion of manageable costs of the tariffs), except for subsidiary Companhia Jaguari de Energia (“CPFL Santa Cruz”), whose amortization started in the Annual Tariff Review – RTA of March 2017 due to the renewal of its concession in 2015.

25.2 Periodic tariff review (“RTP”) and Annual tariff adjustment (“RTA”)

Subsidiary	Month	2018		2017		2016	
		RTA / RTP	Effect perceived by consumers (a)	RTA / RTP	Effect perceived by consumers (a)	RTA / RTP	Effect perceived by consumers (a)
CPFL Paulista	April	12.68%	16.90%	-0.80%	-10.50%	9.89%	7.55%
CPFL Piratininga	October	20.01%	19.25%	7.69%	17.28%	-12.54%	-24.21%
RGE	June	21.27%	20.58%	3.57%	5.00%	-1.48%	-7.51%
RGE Sul	April	18.45%	22.47%	-0.20%	-6.43%	3.94%	-0.34%
Companhia Luz e Força Santa Cruz	March	(b)	(b)	-1.28%	-10.37%	22.51%	7.15%
CPFL Leste Paulista	March	(b)	(b)	0.76%	-3.28%	21.04%	13.32%
Companhia Jaguari de Energia (CPFL Santa Cruz)	March	5.71%	(b)	2.05%	-8.42%	29.46%	13.25%
CPFL Sul Paulista	March	(b)	(b)	1.64%	-4.15%	24.35%	12.82%
CPFL Mococa	March	(b)	(b)	1.65%	-2.56%	16.57%	9.02%

(a) Represents the average effect perceived by consumers, as a result of the elimination from the tariff base of financial components that had been added in the prior tariff adjustment.

(b) As mentioned in note 14.4.2, at December 31, 2017, the EGM approved the grouping of subsidiaries Companhia Luz e Força Santa Cruz, Companhia Leste Paulista de Energia, Companhia Jaguari de Energia, Companhia Sul Paulista de Energia e Companhia Luz and Força de Mococa. In accordance with Normative Resolution 716, of May 3, 2016, until the first tariff review of the grouped concessionaire, which will take place in March 2021, ANEEL may apply the procedure that divides over time the variation in the

tariffs of the former concessions and the unified tariff. This occurred in the tariff adjustment of March 2018.

On March 13, 2018, the ANEEL published REH No. 2,376, which set the average annual tariff adjustment of Companhia Jaguari de Energia (“CPFL Santa Cruz”), effective as of March 22, 2018, at 5.71%, 4.41% regarding the economic tariff adjustment and 1.30% regarding relevant financial components. The average effect to be perceived by consumers of the original concessions are:

	Jaguari	Mococa	Leste Paulista	Sul Paulista	Santa Cruz
Effect perceived by consumers	21.15%	3.40%	7.03%	7.50%	5.32%

25.3 Energy Development Account (CDE) – Low-income, tariff discounts – judicial injunctions, and other tariff discounts

Law No. 12,783 of January 11, 2013 determined that the amounts related to the low-income subsidy, as well as other tariff discounts shall be fully subsidized by amount from the CDE.

In 2018, the Company registered income of R\$1,536,366 (R\$1,419,128 in 2017 and R\$ 1,038,621 in 2016), of which (i) R\$78,081 relates to the low-income subsidy (R\$ 96,882 in 2017 and R\$ 93,879 in 2016), (ii) R\$1,354,845 relates to other tariff discounts (R\$1,226,777 in 2017 and R\$ 944,742 in 2016) and (iii) R\$103,440 relates to tariff discounts – CCRBT injunctions and subsidy (R\$95,469 in 2017). These items were recorded against item to other receivables in line item Receivables – CDE (note 11) and other payables in line item Tariff discounts – CDE (note 22.)

25.4 Tariff flags

The system of application of Tariff Flags was created by means of Normative Resolution No. 547/2013 in effect as from January 1, 2015. Such mechanism is intended essentially to signal to consumers the conditions of electric energy generation in the National Interconnected System - SIN. A green flag indicates favorable conditions and the tariff does not rise. A yellow flag indicates less favorable conditions, and the red flag, segregated into two levels, is activated in more critical conditions. For every 100 KWh consumed, before tax effects, the yellow flag results in increases of R\$1.00 in the tariff, while the red flag, depending on the level, of R\$ 3.00 (level 1) and R\$ 5.00 (level 2). The informed amounts are in effect since the decision of the Collegiate Board in Public Hearing No. 61/2017, as from November 1, 2017.

In 2018, ANEEL approved the Tariff Flags billed from November 2017 to October 2018. The amount approved in this period was R\$1,205,247. Out of this amount, R\$297,340, referring to November and December 2017, were used to offset part of the sector financial asset and liability (note 8) and R\$ 907,907, referring to the January to October 2018 approval, due to Closing Order No. 4,356 of December 22, 2017, were classified as sector financial asset and liability. The amount of R\$ 126,185, with respect to the tariff flag billed for November and December 2018, was not approved and is recorded in regulatory fees (note 19).

25.5 Energy Development Account – CDE

ANEEL, by means of Ratifying Resolution (“REH”) No. 2,358 of December 19, 2017, amended by REH No. 2,368 of February 9, 2018, established the definitive annual quotas of CDE for the year 2018.

These quotas comprise: (i) annual quota of the CDE – USAGE account; and (ii) quota of the CDE – Energy account, related to part of the CDE contributions received by the electric energy distribution concessionaires in the period from January 2013 to January 2014, which should be charged from consumers and passed on to the CDE Account in up to five years from the RTE of 2015. Nevertheless, ANEEL (Brazilian Electricity Regulatory Agency) through Public Hearing 37/2018 reviewed the 2018 budget and determined a new quota for the energy development account “CDE – Usage”) for the months from September to December 2018 and maintained unaltered the quota for “CDE – Energy”, according to Ratifying Resolution REH 2,446 of September 4, 2018. Furthermore, by means of REH No. 2.004 of December 15, 2015, ANEEL established another quota intended for the amortization of the ACR Account, whose amount were updated by REH No. 2.231, of April 25, 2017, with payment and transfer to the CDE Account for the period of April 2017 to March 2018. The same resolution defined the amounts for the period of April 2018 to March 2020.

25.6 Adjustment for refunding the Reserve Energy Charge (“EER”) of Angra III

ANEEL approved through REH No. 2,214 of March 28, 2017 the republication of the energy tariff – TE and Distribution System Usage Tariff - TUSD for the distribution subsidiaries, with the purpose of refunding the amount forecast for the Reserve Energy Charge (EER) of the energy generation company UTN Almirante Alvaro Alberto - Unit III (Angra III).

The tariffs resulting from this decision were effective in April 2017, however, as the reading period of each consuming unit does not coincide with the calendar month, this reduction occurred in the revenue amounts of April and May 2017, with its impact diluted between the two periods.

The average effect perceived by the consumers was: -15.28% at CPFL Paulista, -6.8% at CPFL Piratininga, -10.89% at RGE, -13.76% at RGE Sul, -13.76% at Companhia Luz e Força Santa Cruz, -14.81% at Companhia Leste Paulista de Energia, -14.71% at Companhia Luz e Força de Mococa, -14.29% at Companhia Sul Paulista de Energia (as mentioned in note 14.4.2, in 2017 the subsidiaries CPFL Santa Cruz, CPFL Jaguari, CPFL Leste Paulista, CPFL Sul Paulista and CPFL Mococa were grouped, and they adopted the name CPFL Santa Cruz), and -16.49% at Companhia Jaguari de Energia ("CPFL Santa Cruz").

The estimated impact of this adjustment is an average reduction of -12.85% in revenues of distribution subsidiaries in April 2017.

(26) COST OF ELECTRIC ENERGY

		2018
	In GWh	R\$
<u>Electricity purchased for resale</u>		
Itaipu Binacional	11,117	2,668,346
PROINFA	1,111	330,638
Energy purchased through auction in the regulated market, bilateral contracts and spot market	61,461	13,969,953
PIS and COFINS credit	-	(1,502,673)
Subtotal	73,689	15,466,265
<u>Electricity network usage charge</u>		
Basic network charges		2,114,720
Transmission from Itaipu		266,153
Connection charges		162,852
Charges for use of the distribution system		48,811
System service charges - ESS, net of transfers from CONER		(106,002)
Reserve energy charges - EER		134,824
PIS and COFINS credit		(249,458)
Subtotal		2,371,901
Total		17,838,165
		2017
	In GWh	R\$
<u>Electricity purchased for resale</u>		
Itaipu Binacional	11,779	2,350,858
PROINFA	1,142	293,161
Energy purchased through auction in the regulated market, bilateral contracts and spot market	65,053	14,536,257
PIS and COFINS credit	-	(1,562,779)
Subtotal	77,974	15,617,498
<u>Electricity network usage charge</u>		
Basic network charges		1,541,629
Transmission from Itaipu		159,896
Connection charges		122,536
Charges for use of the distribution system		39,451
		(452,978)

System service charges - ESS, net of transfers from CONER	
Reserve energy charges - EER	(303)
PIS and COFINS credit	(126,213)
Subtotal	1,284,020

Total **16,901,518**

	In GWh (*)	2016 R\$
<u>Electricity purchased for resale</u>		
Itaipu Binacional	10,497	2,025,780
Spot market / PROINFA	2,253	269,792
Energy purchased through auction in the regulated market and bilateral contracts	51,225	8,541,677
PIS and COFINS credit	-	(987,997)
Subtotal	63,975	9,849,252

Electricity network usage charge

Basic network charges		834,341
Transmission from Itaipu		53,248
Connection charges		84,927
Charges for use of the distribution system		38,699
System service charges - ESS, net of transfers from CONER		362,735
Reserve energy charges - EER		106,925
PIS and COFINS credit		(129,883)
Subtotal		1,350,990

Total **11,200,242**

(*) Information not audited by the independent auditors

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(27) OPERATING COSTS AND EXPENSES

	2018			
	Cost of operation	Cost of services rendered to third parties	Selling	Operating Expenses General and administrative
Personnel	901,333	-	172,700	340,444
Private pension plans	89,909	-	-	-
Materials	228,001	888	9,089	20,100
Third party services	210,234	2,294	166,693	312,530
Depreciation and amortization	1,237,627	-	4,260	65,310
Cost of infrastructure construction	-	1,772,162	-	-
Others	66,650	(6)	255,442	248,890
Collection fees	-	-	87,432	-
Allowance for doubtful accounts	-	-	169,259	-
Leases and rentals	43,898	-	-	22,890
Publicity and advertising	21	-	15	19,150
Legal, judicial and indemnities	-	-	-	186,680
Donations, contributions and subsidies	2,053	-	-	5,100
Gain (loss) on disposal, retirement and other noncurrent assets	-	-	-	-
Amortization of concession intangible asset	-	-	-	-
Amortization of premium paid - GSF	13,413	-	-	-
Financial compensation for use of water resources	11,140	-	-	-
Impairment	-	-	-	-
Others	(3,875)	(6)	(1,264)	15,040
Total	2,733,754	1,775,339	608,184	987,290

	2017			
	Cost of operation	Cost of services rendered to third parties	Selling	Operating Expenses General and administrative
Personnel	882,150	2	170,859	324,140
Private pension plans	113,887	-	-	-
Materials	222,650	1,061	2,444	23,810
Third party services	251,549	1,856	186,525	287,220
Depreciation and amortization	1,143,795	-	5,403	93,630
Cost of infrastructure construction	-	2,071,698	-	-
Others	157,113	(7)	225,000	218,240
Collection fees	11,710	-	68,757	-
Allowance for doubtful accounts	-	-	155,097	-
Leases and rentals	52,734	-	(148)	19,740

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Publicity and advertising	202	-	1	17,41
Legal, judicial and indemnities	-	-	-	188,35
Donations, contributions and subsidies	88	-	2	3,92
Gain (loss) on disposal, retirement and other noncurrent assets	-	-	-	-
Amortization of concession intangible asset	-	-	-	-
Amortization of premium paid - GSF	9,594	-	-	-
Financial compensation for use of water resources	8,656	-	-	-
Impairment	-	-	-	-
Others	74,130	(7)	1,291	(11,184)
Total	2,771,145	2,074,611	590,232	947,07

			2016 Operating Expenses	
	Cost of operation	Cost of services rendered to third parties	Selling	General and administrative
Personnel	686,434	1	134,864	272,61
Private pension plans	76,505	-	-	-
Materials	164,168	1,412	8,191	16,17
Third party services	271,623	3,416	146,957	229,19
Depreciation and amortization	937,506	-	3,602	94,94
Cost of infrastructure construction	-	1,352,214	-	-
Others	112,560	(11)	253,638	236,47
Collection fees	-	-	65,562	-
Allowance for doubtful accounts	-	-	176,349	-
Leases and rentals	42,163	-	113	17,10
Publicity and advertising	150	-	29	11,65
Legal, judicial and indemnities	-	-	-	181,88
Donations, contributions and subsidies	54	-	9	2,42
Gain (loss) on disposal, retirement and other noncurrent assets	-	-	-	-
Amortization of concession intangible asset	-	-	-	-
Amortization of premium paid - GSF	9,594	-	-	-
Financial compensation for use of water resources	12,233	-	-	-
Impairment	-	-	-	-
Others	48,367	(11)	11,575	23,39
Total	2,248,795	1,357,032	547,251	849,41

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(28) FINANCE INCOME (EXPENSES)

	2018	2017	2016
<u>Financial Income</u>			
Income from financial investments	222,773	457,255	667,429
Late payment interest and fines	276,350	265,455	246,045
Adjustment for inflation of tax credits	14,819	19,623	32,371
Adjustment for inflation of escrow deposits	37,322	49,502	35,228
Adjustment for inflation and exchange rate changes	70,201	60,999	147,849
Discount on purchase of ICMS credit	33,779	16,386	16,198
Adjustments to the sector financial asset (note 8)	80,240	-	32,747
PIS and COFINS on other finance income	(46,217)	(48,322)	(63,223)
PIS and COFINS on interest on capital	(39,355)	(27,798)	(2,324)
Other	112,503	87,214	88,182
Total	762,413	880,314	1,200,503
<u>Financial expenses</u>			
Interest on debts	(1,328,693)	(1,661,060)	(1,811,263)
Adjustment for inflation and exchange rate changes	(368,141)	(540,053)	(703,128)
(-) Capitalized interest	28,606	50,543	68,082
Adjustments to the sector financial liability (note 8)	-	(82,333)	(25,079)
Use of public asset	(17,759)	(8,048)	(14,950)
Others	(179,114)	(126,917)	(167,638)
Total	(1,865,100)	(2,367,868)	(2,653,977)
Financial expenses, net	(1,102,687)	(1,487,554)	(1,453,474)

Interests were capitalized at an average rate of 8.27% p.a. in 2018 (8.54% p.a. in 2017 and 10.9% p.a. in 2016) on qualifying assets, in accordance with IAS 23.

In line item of Adjustment for inflation and exchange rate changes includes the effects of gains of R\$ 617,545 at 2018 (losses of R\$ 235,852 in 2017 and losses of R\$ 1,399,988 in 2016) on derivative instruments (note 33).

(29) SEGMENT INFORMATION

The segregation of the Company's operating segments is based on the internal financial information and management structure and is made by type of business: electric energy distribution, electric energy generation (conventional and renewable sources), electric energy commercialization and services rendered activities.

Profit or loss, assets and liabilities per segment include items directly attributable to the segment, as well as those that can be allocated on a reasonable basis, if applicable. Prices charged between segments are based on similar market transactions. Note 1 presents the subsidiaries in accordance with their areas of

operation and provides further information on each subsidiary and its business area and segment.

Beginning in 2018, due to the way our new Management monitors segment results, (i) intangible assets acquired in business combination transactions that are recorded in the parent company that were previously allocated to the respective segments are now allocated to the segment "Others"; and (ii) eliminations between different segments are now classified in the "elimination" column instead of being presented in each segment. For comparison purposes, the segment information disclosed for 2017 has been restated using the same criteria. The 2016 related segment information has not been restated, as the effects are immaterial.

The information segregated by segment is presented below, in accordance with the criteria established by Executive Officers:

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2018	Distribution	Generation	Generation	Commercialization	Services	Total	Other (*)	Elimination
	(conventional	source)	(renewable					
		source)	source)					
Net operating revenue	22,457,079	661,831	1,468,254	3,491,300	58,163	28,136,627	-	
(-) Intersegment revenues	10,238	482,548	468,065	5,152	474,646	1,440,650	-	(1,440,650)
Cost of electric energy	(15,022,304)	(102,421)	(320,346)	(3,352,745)	-	(18,797,816)	-	
Operating costs and expenses	(4,440,783)	(104,606)	(407,211)	(47,287)	(437,709)	(5,437,597)	(39,333)	
Depreciation and amortization	(766,796)	(116,372)	(623,106)	(2,346)	(22,521)	(1,531,143)	(62,922)	
Income from electric energy service	2,237,434	820,979	585,655	94,074	72,579	3,810,721	(102,255)	
Equity	-	334,198	-	-	-	334,198	-	
Finance income	574,685	75,844	131,694	46,102	5,782	834,107	(22,092)	
Finance expenses	(884,583)	(324,121)	(635,820)	(59,128)	(5,908)	(1,909,559)	(5,143)	
Profit (loss) before taxes	1,927,537	906,899	81,530	81,049	72,453	3,069,467	(129,490)	
Income tax and social contribution	(495,120)	(137,089)	37,276	(27,945)	(29,529)	(652,408)	(121,575)	
Profit (loss) for the year	1,432,416	769,810	118,805	53,104	42,924	2,417,060	(251,065)	
Purchases of PP&E and intangible assets	1,769,569	11,517	225,202	2,926	52,855	2,062,069	353	
2017	Distribution	Generation	Generation	Commercialization	Services	Total	Other (*)	Elimination
	(conventional	source)	(renewable					
		source)	source)					
Net operating revenue	21,068,435	741,842	1,489,932	3,402,804	40,611	26,743,625	1,281	
(-) Intersegment	8,182	448,427	469,152	11,297	444,935	1,381,993	-	(1,381,993)

23.8.2 Summarized financial information of subsidiaries that have interests of noncontrolling shareholders 468

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revenues								
Cost of electric energy	(14,146,739)	(147,380)	(348,029)	(3,196,028)	-	(17,838,176)	-	
Operating costs and expenses	(4,695,445)	(156,345)	(389,443)	(47,296)	(398,188)	(5,686,717)	(51,121)	
Depreciation and amortization	(703,601)	(120,554)	(617,017)	(3,054)	(19,760)	(1,463,986)	(65,066)	
Income from electric energy service	1,530,833	765,990	604,596	167,724	67,598	3,136,740	(114,906)	
Equity	-	312,390	-	-	-	312,390	-	
Finance income	597,203	108,433	137,765	25,895	11,349	880,644	20,505	
Finance expenses	(1,163,689)	(437,009)	(648,571)	(58,801)	(7,101)	(2,315,170)	(73,532)	
Profit (loss) before taxes	964,347	749,805	93,789	134,818	71,846	2,014,605	(167,933)	
Income tax and social contribution	(299,510)	(95,688)	(74,125)	(44,527)	(16,994)	(530,845)	(72,784)	
Profit (loss) for the year	664,837	654,117	19,665	90,290	54,852	1,483,761	(240,717)	
Purchases of PP&E and intangible assets	1,882,502	8,973	621,046	2,927	54,149	2,569,598	835	

2016	Distribution	Generation (conventional source)	Generation (renewable source)	Commercialization	Services	Total	Other (*)	Elimination
Net operating revenue	15,017,166	593,775	1,334,571	2,024,350	81,595	19,051,456	60,633	
(-) Intersegment revenues	22,526	409,338	338,357	62,757	318,770	1,151,748	8,661	(1,160,409)
Cost of electric energy	(9,747,720)	(98,521)	(272,125)	(1,876,952)	-	(11,995,318)	-	
Operating costs and expenses	(3,447,081)	(106,364)	(407,673)	(47,548)	(322,131)	(4,330,797)	(132,611)	
Depreciation and	(591,334)	(126,596)	(553,169)	(3,779)	(12,870)	(1,287,748)	(3,417)	

23.8.2 Summarized financial information of subsidiaries that have interests of noncontrolling shareholders 469

amortization				158,829			
Income from electric energy service Equity	1,253,557	671,631	439,961		65,363	2,589,342	(66,734)
	-	311,414	-		-	311,414	-
Finance income	781,365	182,574	132,653	31,513	10,742	1,138,848	61,655
Finance expenses	(1,331,973)	(562,196)	(667,344)	(24,761)	(5,272)	(2,591,546)	(62,432)
Profit (loss) before taxes	702,950	603,424	(94,730)	165,581	70,832	1,448,057	(67,510)
Income tax and social contribution	(295,748)	(98,530)	(46,311)	(53,225)	(17,019)	(510,833)	9,343
Profit (loss) for the year	407,202	504,894	(141,041)	112,357	53,813	937,225	(58,167)
Purchases of PP&E and intangible assets	1,200,621	7,564	978,896	3,713	42,954	2,233,748	4,199

(*) Others – refer basically to assets and transactions which are not related to any of the identified segments.

(30) RELATED PARTY TRANSACTIONS

The Company's controlling shareholders were, as of December 31, 2018, as follows:

- State Grid Brazil Power Participações S.A

Indirect subsidiary of State Grid Corporation of China, a Chinese state-owned company primarily engaged in developing and operating businesses in the electric energy sector.

- ESC Energia S.A.

Subsidiary of State Grid Brazil Power Participações S.A.

The direct and indirect interest in operating subsidiaries are described in note 1.

Controlling shareholders, associates companies, joint ventures and entities under common control that in some way exercise significant influence over the Company are considered to be related parties.

The main transactions are listed below:

a) Purchase and sale of energy and charges - refer basically to energy purchased or sold by distribution, commercialization and generation subsidiaries through short or long-term agreements and tariffs for the use of the distribution system (TUSD). Such transactions, when conducted in the free market, are carried out under conditions considered by the Company as similar to market conditions at the time of the trading, according to internal policies previously established by the Company's management. When conducted in the regulated market, the prices charged are set through mechanisms established by the Grant Authority.

b) Intangible assets, Property, plant and equipment, Materials and Service – refers mainly to rendered services in advisory and management of energy plants, consulting and engineering.

c) Advances – refer to advances for investments in research and development.

To ensure that commercial transactions with related parties are conducted under usual market conditions, the Company set up a "Related Parties Committee", comprising representatives of the controlling shareholders, the Company and one independent member, responsible for analyzing the main transactions with related parties.

Management has considered the closeness of relationship with the related party together with other factors to determine the level of detail of the disclosed transactions and believes that significant information regarding transactions with related parties has been adequately disclosed.

The total compensation of key management personnel in 2018 was R\$ 90,783 (R\$ 73,670 in 2017 and R\$ 58,132 in 2016). This amount comprises R\$78,335 (R\$64,516 in 2017 and R\$ R\$49,989 in 2016) in respect of short-term benefits, R\$2,160 (R\$1,516 in 2017 and R\$ 1,212 in 2016) of post-employment benefits and a provision of R\$10,288 (R\$ 7,638 in 2017 and reversal of provision of R\$ 6,930 in 2016) for other long-term benefits, and refers to the amount recognized on an accrual basis.

Transactions with entities under common control basically refer to transmission system charge paid by the Company's subsidiaries to the direct or indirect subsidiaries of State Grid Corporation of China.

Transactions involving controlling shareholders, entities under common control or with significant influence and joint ventures:

	ASSETS		LIA
	December 31, 2018	December 31, 2017	December 31, 2016
Advances			
BAESA – Energética Barra Grande S.A.	-	-	6
Foz do Chapecó Energia S.A.	-	-	9
ENERCAN - Campos Novos Energia S.A.	-	-	1,1
EPASA - Centrais Elétricas da Paraiba	-	-	4
Energy purchases and sales, and charges			
Entities under common control (Subsidiaries of State Grid Corporation of China)	-	-	-
BAESA – Energética Barra Grande S.A.	-	-	2,9
Foz do Chapecó Energia S.A.	-	-	41,8

ENERCAN - Campos Novos Energia S.A.	943	823	78,6
EPASA - Centrais Elétricas da Paraíba	-	-	13,3
Intangible assets, property, plant and equipment, materials and services rendered			
BAESA – Energética Barra Grande S.A.	2	153	
Foz do Chapecó Energia S.A.	15	2	
ENERCAN - Campos Novos Energia S.A.	2	152	
EPASA - Centrais Elétricas da Paraíba S.A.	534	416	
Intragroup loans			
EPASA - Centrais Elétricas da Paraíba S.A.	-	-	
Dividend and interest on own capital			
BAESA – Energética Barra Grande S.A.	3	108	
Chapecoense Geração S.A.	33,733	32,734	
ENERCAN - Campos Novos Energia S.A.	65,010	21,184	
Others			
Instituto CPFL	-	-	

(31) INSURANCE

The subsidiaries maintain insurance policies with coverage based on specialized advice and takes into account the nature and degree of risk. The amounts are considered sufficient to cover any significant losses on assets and/or responsibilities. The main insurance coverages are as follows.

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Description	Type of cover	Dec. 31, 2018
Concession financial asset / Intangible assets	Fire, lightning, explosion, machinery breakdown, electrical damage and engineering risk	7,630,552
Transport	National transport	502,930
Stored materials	Fire, lightning, explosion and robbery	249,501
Automobiles	Comprehensive cover	14,585
Civil liability	Electric energy distributors and others	268,000
Personnel	Group life and personal accidents	745,991
Others	Operational risks and others	352,931
Total		9,764,489

For the civil liability insurance of the officers, the insured amount is shared among the companies of the CPFL Energia Group. The premium is paid individually by each company involved, and the gross revenue is the base for the apportionment criterion.

(32) RISK MANAGEMENT

The business of the Group comprise mainly the generation, commercialization and distribution of electric energy. As public utilities concessionaires, the activities and/or tariffs of its principal subsidiaries are regulated by ANEEL.

Risk management structure

At CPFL Group, the risk management is conducted through a structure that involves the Board of Directors and Supervisory Board, Advisory Committees from Board of Directors, Executive Board, Internal Audit, Risks and Compliance Management and business areas. This management is regulated by the Corporate Risk Management Policy, which describes the risk management model as well as the attributions of each agent.

The Board of Directors of CPFL Energia is responsible for deciding on the risk limit methodologies recommended by the Executive Board, and for being aware of the exposures and mitigation plans presented in the event these limits are exceeded. This forum is also responsible for being aware of and monitoring any important weaknesses in controls and/or processes, as well as relevant regulatory compliance failures, following up on the plans proposed by the Executive Board to correct them.

The Advisory Committee(s) of the Board of Directors, in its role(s) of technical body(ies), is responsible for becoming aware of (i) the risk monitoring models, (ii) the exposures to risks, and (iii) the control levels (including their effectiveness), as well as follow the progress of the mitigation actions signaled to readapt the exposures to the approved limits, supporting the Board of Directors in the performance of its statutory role related to risk management.

The Supervisory Board of CPFL Energia is responsible for, among other things, certifying that Management has means to identify the risks on the preparation and disclosure of the financial statements to which the CPFL Group is exposed, as well as for monitoring the effectiveness of the control environment.

The Executive Board of CPFL Energia is responsible for conducting businesses within the risk limits defined, and should take the required measures to avoid that the exposure to risks exceeds such limits and report any excess of the limit to the Board of Directors of CPFL Energia, presenting mitigation actions.

The Internal Audit, Risks and Compliance Management is responsible for the (i) coordination of the risk management process at the CPFL Group, developing and keeping updated Corporate Risk Management methodologies that involve the identification, measurement, monitoring and reporting of the risks to which the CPFL Group is exposed; (ii) periodic monitoring of the risk exposures and monitoring of the implementation of mitigation actions by the business managers; (iii) monitoring and reporting of the status of the mitigation plans signaled by for reclassification of the exposures to the approved limits; and (iv) assessment of the internal control environment of the CPFL Group companies and interaction with the respective Business Managers, seeking the definition of action plans in the event of deficiencies identified.

The business areas have the primary responsibility for the management of the risks inherent to its processes, and should conduct them within the exposure limits defined and implementing mitigation plans for the main exposures, as well as developing and maintaining an adequate environment of operational controls for the effectiveness and continuity of the business of their respective management units.

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The main market risk factors that affect the businesses are as follows:

Foreign exchange risk: This risk derives from the possibility of the Group incurring losses and cash constraints due to fluctuations in exchange rates, increasing the balances of liabilities denominated in foreign currency or decreasing the portion of revenue arising from annual adjustment of part of the tariff based on the fluctuation of the dollar, in power sale agreements of the joint venture ENERCAN. The exposure related to funding in foreign currency is hedged by swap transactions. The exposure related to ENERCAN revenue, proportional to the interest held by the Group, is hedged by financial instruments such as the zero cost collar described in note 33.b.1. The quantification of these risks is presented in note 33. In addition, the subsidiaries are exposed in their operating activities to fluctuations in exchange rates on purchase of electricity from Itaipu. The compensation mechanism - CVA protects the distribution subsidiaries against any economic losses.

Interest rate risk and inflation indexes: This risk arises due to the possibility of the Group incurring losses due to fluctuations in interest rates and in inflation indexes, which would increase the finance costs related to borrowings and debentures. The quantification of this risk is presented in note 33.

Credit risk: This risk arises from the possibility of the subsidiaries incurring losses resulting from difficulties in collecting amounts billed to customers. This risk is managed by the sales and services segments through norms and guidelines applied in terms of the approval, guarantees required and monitoring of the operations. In the distribution segment, even though it is highly pulverized, the risk is managed through monitoring of defaults, collection measures and cutting off supply. In the generation segment there are contracts under the regulated environment (ACR) and bilateral agreements that call for the posting of guarantees.

Risk of under/overcontracting from distributors: Risk inherent to the energy distribution business in the Brazilian market to which the distributors of the CPFL Group and all distributors in the market are exposed. Distributors can be prevented from fully passing through the costs of their electric energy purchases in two situations: (i) volume of energy contracted above 105% of the energy demanded by consumers and (ii) level of contracts lower than 100% of such demanded energy. In the first case, the energy contracted above 105% is sold in the CCEE (Electric Energy Trading Chamber) and is not passed through to consumers, that is, in PLD (Spot price used to evaluate the energy traded in the spot market - "Preço de Liquidação de Diferenças") scenarios lower than the purchase price of these contracts, there is a loss for the concession. In the second case, the distributors are required to purchase energy at the PLD price at the CCEE and do not have guarantees of full pass-through to the consumer tariffs, and there is also a penalty for insufficiency of contractual guarantee. These situations may be mitigated if the distributors are able to justify the involuntary exposures or surpluses.

Market risk of commercialization companies: This risk arises from the possibility of commercialization companies incurring losses due to variations in the spot prices that will value the positions of energy surplus or deficit of its portfolio in the free market, marked against the market price of electricity.

Risk of energy shortages: The energy sold by subsidiaries is primarily generated by hydropower plants. A prolonged period of low rainfall could result in a reduction in the volume of water in the power plants' reservoirs, compromising the recovery of their volume, and resulting in losses due to the increase in the cost of purchasing energy or a reduction in revenue due to the introduction of comprehensive electric energy saving programs or other water rationing programs, as in 2001.

Rains below normal levels observed in the period from May to September did not cause energy supply risk in 2018, however, there was a strong thermoelectric dispatch and consequent reduction of hydroelectric generation, which significantly impacted the costs with purchase of energy and charges for the electric sector agents in this period.

Risk of acceleration of debts: The Company has borrowing agreements and debentures with restrictive covenants normally applicable to these types of transactions, involving compliance with economic and financial ratios. These covenants are monitored and do not restrict the capacity to operate normally.

Regulatory risk: The electric energy supplied tariffs charged to captive consumers by the distribution subsidiaries are set by ANEEL, at intervals established in the concession agreements entered into with the Federal Government and in accordance with the periodic tariff review methodology established for the tariff cycle. Once the methodology has been ratified, ANEEL establishes tariffs to be charged by the distributor to the final consumers. In accordance with Law No. 8,987/1995, the tariffs set shall ensure the economic and financial equilibrium of the concession agreement at the time of the tariff review, but could result in lower adjustments than expected by the electric energy distributors.

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Financial instruments risk management

The Company and its subsidiaries maintain operating and financial policies and strategies to protect the liquidity, safety and profitability of their assets. Accordingly, control and follow-up procedures are in place as regards the transactions and balances of financial instruments, for the purpose of monitoring the risks and current rates in relation to market conditions.

Risk management controls: In order to manage the risks inherent to the financial instruments and to monitor the procedures established by Management, the Company and its subsidiaries use Luna and Bloomberg software systems to calculate the mark to market, stress testing and duration of the instruments, and assess the risks to which the Company and its subsidiaries are exposed. Historically, the financial instruments contracted by the Company and its subsidiaries supported by these tools have produced adequate risk mitigation results. It must be stressed that the Company and its subsidiaries routinely contract derivatives, always with the appropriate levels of approval, only in the event of exposure that Management regards as a risk. The Company and its subsidiaries do not enter into transactions involving speculative derivatives.

(33) FINANCIAL INSTRUMENTS

The main financial instruments, at fair value and/or the carrying amount is significantly different of the respective fair value, classified in accordance with the Group's accounting practices, are:

				December 31, 2018	
	Note	Category / Measurement	Level (*)	Carrying amount	Fair value
Asset					
Cash and cash equivalent	5	(a)	Level 1	342,346	342,346
Cash and cash equivalent	5	(a)	Level 2	1,549,111	1,549,111
Derivatives	33	(a)	Level 2	640,625	640,625
Derivatives - zero-cost collar	33	(a)	Level 3	16,367	16,367
Concession financial asset - distribution	10	(a)	Level 3	7,430,149	7,430,149
				9,978,598	9,978,598
Liability					
Borrowings - principal and interest	16	(b)	Level 2 (***)	5,804,704	5,778,656
Borrowings - principal and interest (**)	16	(a)	Level 2	5,631,255	5,631,255
Debentures - Principal and interest	17	(b)	Level 2 (***)	8,506,478	8,551,063
Debentures - Principal and interest (**)	17	(a)	Level 2	434,367	434,367
Derivatives	33	(a)	Level 2	31,798	31,798
				20,408,602	20,427,139

(*) Refers to the hierarchy for fair value measurement

(**) As a result of the initial designation of this financial liability, the consolidated balances reported a gain of R\$ 37,421 in 2018 (R\$ 21,137 in 2017).

(***) Only for disclosure purposes, in accordance with IFRS 7

Key

Category:

(a) - Measured at fair value through profit or loss

(b) - Measured at amortized cost

The classification of financial instruments in “amortized cost” or “fair value through profit or loss” is based on business model and in the characteristics of expected cash flow for each instrument.

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The financial instruments for which the carrying amounts approximate the fair values at the end of the reporting period are:

- Financial assets: (i) consumers, concessionaires and licensees, (ii) leases, (iii) associates, subsidiaries and parent company, (iv) receivables – CDE, (v) pledges, funds and restricted deposits, (vi) services rendered to third parties, (vii) Collection agreements, and (viii) sector financial asset.
- Financial liabilities: (i) trade payables, (ii) regulatory charges, (iii) use of public asset, (iv) consumers and concessionaires payable, (v) FNDCT/EPE/PROCEL, (vi) collection agreement, (vii) reversal fund, (viii) payables for business combination, (ix) tariff discount CDE, and (x) sector financial liability.

In addition, in 2018 there were no transfers between hierarchical levels of fair value.

a) Valuation of financial instruments

As mentioned in note 4, the fair value of a security corresponds to its maturity value (redemption value) adjusted to present value by the discount factor (relating to the maturity date of the security) obtained from the market interest curve, in Brazilian reais.

IFRS 7 requires the classification in a three-level hierarchy for fair value measurement of financial instruments, based on observable and unobservable inputs related to the valuation of a financial instrument at the measurement date.

IFRS 7 also defines observable inputs as market data obtained from independent sources and unobservable inputs that reflect market assumptions.

The three levels of the fair value hierarchy are:

- Level 1: quoted prices in an active market for identical instruments;
- Level 2: observable inputs other than quoted prices in an active market that are observable for the asset or liability, directly (*i.e.* as prices) or indirectly (*i.e.* derived from prices);
- Level 3: inputs for the instruments that are not based on observable market data.

As the distribution subsidiaries have classified their concession financial asset as fair value through profit or loss, the relevant factors for fair value measurement are not publicly observable. The fair value hierarchy classification is therefore level 3. The changes between years and the respective gains in profit for the year of R\$345,015 (R\$ 204,443 in 2017 and R\$ 186,148 in 2016), and the main assumptions are described in note 10 and 25.

Additionally, the main assumptions used in the fair value measurement of the zero-cost collar derivative, the fair value hierarchy of which is Level 3, are disclosed in note 33 b.1.

The Company recognizes in “Investments at cost” in the financial statements the 5.94% interest held by the indirect subsidiary Paulista Lajeado Energia S.A. in the total capital of Investco S.A. (“Investco”), in the form of 28,154,140 common shares and 18,593,070 preferred shares not quoted in stock markets. The main objective of its operations is to generate electric energy for commercialization by the shareholders holding

the concession. The Company recognizes the investment at cost, that is the best estimate of their fair value, since there are no available reliable information for the fair value calculation, according to IFRS 9.

b) Derivatives

The Group has the policy of using derivatives to reduce their risks of fluctuations in exchange and interest rates (*economic hedge*), without any speculative purposes. The Group has exchange rate derivatives compatible with the exchange rate risks net exposure, including all the assets and liabilities tied to exchange rate changes.

The derivative instruments entered into by the Group are currency or interest rate swaps with no leverage component, margin call requirements or daily or periodical adjustments. Furthermore, in 2015 subsidiary CPFL Geração contracted a zero-cost collar (see item b.1 below).

As a large part of the derivatives entered into by the subsidiaries have their terms fully aligned with the hedged debts, and in order to obtain more relevant and consistent accounting information through the recognition of income and expenses, these debts were designated at fair value, for accounting purposes (note 16 and 17). Other debts with terms different from the derivatives contracted as a hedge continue to be recognized at amortized cost. Furthermore, the Group did not adopt hedge accounting for derivative instruments.

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At December 31, 2018, the Group had the following swap transactions, all traded on the over-the-counter market:

Strategy	Fair values (carrying amounts)		Fair value, net	Values at cost, net (1)	Gain (loss) on mark to market
	Assets	Liabilities			
Derivatives to hedge debts designated at fair value					
Exchange rate hedge					
Bank Loans - Law 4.131	592,520	(10,775)	581,745	633,270	(51,525)
Bank Loans - Law 4.131	2,899	(21,023)	(18,124)	(3,972)	(14,152)
	595,418	(31,798)	563,620	629,298	(65,678)
Hedge variation price index					
Debêntures	23,081	-	23,081	2,070	21,012
Derivatives to hedge debts not designated at fair value					
Price index hedge:					
Debentures	22,125	-	22,125	21,548	577
Other (2):					
Zero cost collar	16,367	-	16,367	-	16,367
Total	656,992	(31,798)	625,194	652,916	(27,722)
Current	309,484	(8,139)			
Noncurrent	347,507	(23,659)			

(1)The value at cost are the derivative amount without the respective mark to market, while the notional refers to the balance of the debt and is reduced according to the respective amortization;

(2) Due to the characteristics of this derivative (zero-cost collar), the notional amount is presented in U.S. dollar.

For further details on terms and information on debts and debentures, see notes 16 and 17.

Changes in derivatives are stated below:

	December 31, 2017	Interests, Exchange rate variation and monetary restatements	Repayments of principal	December 31, 2018
Derivatives				
to hedge debts designated at fair value	526,148	662,147	(556,927)	631,368
to hedge debts not designated at fair value	17,881	(21,817)	25,484	21,548
Others (zero-cost collar)	-	11,984	(11,984)	-
Mark-to-market (*)	9,095	(36,817)	-	(27,722)
	553,124	615,497	(543,427)	625,194

(*) The effects on profit or loss and OCI for the year ended December 31, 2018 related to the fair value adjustments (MTM) of the derivatives are: (i) a loss of R\$ 14,533 for debts designated at fair value, (ii) a gain of R\$ 13,407 for debts not designated at fair value and (iii) a loss of R\$ 35,691 for other derivatives (zero-cost collar).

As mentioned above, certain subsidiaries applied the fair value option to borrowings and debentures for which there were derivative instruments totally related (notes 16 and 17).

The Group have recognized gains and losses on their derivatives. However, as these derivatives are used as a hedge, these gains and losses minimized the impact of variations in exchange and interest rates on the hedged debts. For the years 2018, 2017 and 2016, the derivatives resulted in the following impacts on the result, recognized in the line item of finance costs on adjustment for inflation and exchange rate changes and in the consolidated comprehensive income in the credit risk in the mark-to-market, the last one related to debts at fair value:

Hedged risk / transaction	Gain (Loss) on Profit or Loss			Gain (Loss) on Comprehensive Income
	2018	2017	2016	2018
Interest rate variation	(19,747)	1,446	243	-
Mark to market	13,135	8,960	33,465	272
Exchange variation	672,061	(169,714)	(1,689,544)	-
Mark to market	(47,904)	(76,544)	255,849	(2,025)
	617,545	(235,852)	(1,399,988)	(1,753)

b.1) Zero-cost collar derivative contracted by CPFL Geração

In 2015, subsidiary CPFL Geração contracted US\$ denominated put and call options, involving the same financial institution as counterpart, and which on a combined basis are characterized as an operation usually known as zero-cost collar. The contracting of this operation does not involve any kind of speculation, inasmuch as it is aimed at minimizing any negative impacts on future revenues of the joint venture ENERCAN, which has electric energy sale agreements with annual restatement of part of the tariff based on the variation in the US\$. In addition, according to Management's view, the scenario in 2015 was favorable for contracting this type of financial instrument, considering the high volatility implicit in dollar options and the fact that there is no initial cost for same.

The total amount contracted was US\$ 111,817 thousand, with due dates between October 1, 2015 and September 30, 2020. As at December 31, 2018, the total amount contracted was US\$ 44,083 thousand, considering the options already settled up to date. The exercise prices of the dollar options vary from R\$ 4.20 to R\$ 4.40 for the put options and from R\$ 5.40 to R\$ 7.50 for the call options.

These options have been measured at fair value in a recurring manner, as required by IFRS 9. The fair value of the options that are part of this operation has been calculated based on the following premises:

Valuation technique(s) and key information	We used the Black Scholes Option Pricing Model, which aims to obtain the theoretical value of the options involving the following variables: the current price of the asset, the strike price of the option, the risk-free interest rate, the time left until the option's maturity date and the volatility of the asset.
Significant unobservable inputs	Volatility determined based on the average market pricing calculations, future dollar and other variables applicable to this specific transaction, with average variation of 18.61%.
Relationship between unobservable inputs and fair value (sensitivity)	A slight rise in long-term volatility, analyzed on an isolated basis, would result in an insignificant increase in fair value. If the volatility were 10% higher and all the other variables remained constant, the net carrying amount (asset) would increase by R\$ 587, resulting in a net asset of R\$ 16,954.

The following table reconciles the opening and closing balances of the call and put options for the year ended December 31, 2018, as required by IFRS 13:

	Assets	Liabilities	Net
As of December 31, 2016	57,715	-	57,715

a) Valuation of financial instruments

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Measurement at fair value	16,715	-	16,715
Net cash received from settlement of flows	(22,372)	-	(22,372)
As of December 31, 2017	52,058	-	52,058
Measurement at fair value	(23,707)	-	(23,707)
Net cash received from settlement of flows	(11,984)	-	(11,984)
As of December 31, 2018	16,367	-	16,367

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The fair value measurement of these financial instruments was recognized in the statement of profit or loss for the year, and no effects were recognized in other comprehensive income.

c) Concession financial assets - distribution

As the distribution subsidiaries have classified the respective financial assets of the concession as measured at fair value through profit or loss, the relevant factors to measure the fair value are not publicly observable and there is no active market. Therefore, the classification of the fair value hierarchy is level 3.

Considering that all contractual characteristics are reflected in the recorded amounts, the Group believes that the carrying amounts reflect their fair values. The accounting measurement of the indemnity arising from the concession is made by applying contractual and legal regulatory criteria.

d) Market risk

Market risk is the risk that changes in market prices – e.g. foreign exchange rates and interest rates – will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return. The Group uses derivatives to manage market risks.

Sensitivity Analysis

In compliance with IFRS 7, the Group performed sensitivity analyses of the main risks to which their financial instruments (including derivatives) are exposed, mainly comprising variations in exchange and interest rates.

If the risk exposure is considered an asset, the risk to be taken into account is a reduction in the pegged indexes, resulting in a negative impact on the results of the Group. Similarly, if the risk exposure is considered a liability, the risk is of an increase in the pegged indexes and the consequent negative effect on the results. The Group therefore quantify the risks in terms of the net exposure of the variables (dollar, euro, CDI, IGP-M, IPCA, TJLP and SELIC), as shown below:

d.1) Exchange rate variation

Considering the level of net exchange rate exposure at December 31, 2018 is maintained, the simulation of the effects by type of financial instrument for three different scenarios would be:

Income (expense) - R\$ thousand

a) Valuation of financial instruments

Instruments	Exposure R\$ thousand (a)	Risk	Currency depreciation (b)	Currency appreciation / depreciation of 25%	Currency appreciation / depreciation of 50%
Financial liability instruments	(4,775,978)		(141,746)	1,087,685	2,317,116
Derivatives - Plain Vanilla Swap	4,845,349	drop in the dollar	143,805	(1,103,484)	(2,350,772)
	69,371		2,059	(15,799)	(33,656)
Financial liability instruments	(857,429)		(54,219)	173,693	401,605
Derivatives - Plain Vanilla Swap	871,755	drop in the euro	55,125	(176,595)	(408,315)
	14,326		906	(2,902)	(6,710)
Total	83,697		2,965	(18,701)	(40,366)
Effects in the accumulated comprehensive income			2,187	(12,704)	(27,594)
Effects in the profit or loss for the year			778	(5,997)	(12,772)

Instruments	Exposure US\$ thousand	Risk	Currency depreciation (b)	Income (expense) - R\$ thousand Currency appreciation / depreciation of 25%(c)	Currency appreciation / depreciation of 50%(c)
Derivatives - Zero-cost collar	44,083	(d) dollar apprec.	(1,770)	(17,126)	(32,482)

(a) The exchange rates considered as of December 31, 2018 were R\$ 3.87 per US\$ 1.00 and R\$ 4.44 per € 1.00.

(b) As per the exchange curves obtained from information made available by B3 S.A., with the exchange rate being considered at R\$ 3.99 and R\$ 4.72, and exchange depreciation at 2.97% and 6.32%, for the US\$ and €, respectively, as of December 31, 2018.

(c) As required by CVM Instruction 475/2008, the percentage increases in the ratios applied refer to the information made available by the B3 S.A..

(d) Owing to the characteristics of this derivative (zero-cost collar), the notional amount is presented in US\$.

Except for the zero cost collar, based on the net exchange exposure in US\$ and euro being an asset, the risk is a drop in the dollar and euro and, therefore, the local exchange rate is appreciated by 25% and 50% in relation to the probable exchange rate.

d.2) Interest rate variation

Assuming that the scenario of net exposure of the financial instruments indexed to variable interest rates at December 31, 2018 is maintained, the net finance cost for the next 12 months for each of the three scenarios defined, would be:

Instruments	Exposure R\$ thousand	Risk	Rate in the period	Most likely scenario (a)	Income (expense) - R\$ thousand		
					Likely scenario	Raise/drop of index by 25% (b)	Raise/drop of index by 50% (b)
Financial asset instruments	2,180,549				143,262	179,078	214,893
Financial liability instruments	(7,104,019)				(466,734)	(583,418)	(700,101)
Derivatives - <i>Plain Vanilla Swap</i>	(5,658,788)				(371,782)	(464,728)	(557,674)
	(10,582,258)	raise of CDI	6.40%	6.57%	(695,254)	(869,068)	(1,042,882)
Financial liability	(153,424)	raise of IGP-M	7.54%	3.19%	(4,894)	(6,118)	(7,341)

instruments

Financial liability instruments	(4,829,388)	raise of TJLP and TLP	6.72% and 7.42%	7.03%	(339,506)	(424,382)	(509,259)
Financial liability instruments	(1,801,795)				(60,180)	(45,135)	(30,090)
Derivatives - Plain Vanilla Swap	550,511				18,387	13,790	9,194
Concession financial asset	7,430,149				248,167	186,125	124,083
	6,178,865	drop in the IPCA	3.69%	3.34%	206,374	154,780	103,187
Sector financial asset and liability	1,508,158				98,784	74,088	49,392
Financial liability instruments	(114,117)				(7,475)	(5,606)	(3,737)
	1,394,041	drop in the SELIC	6.40%	6.55%	91,309	68,482	45,655
Total	(7,992,164)				(741,971)	(1,076,306)	(1,410,640)
Effects in the accumulated comprehensive income					753	597	442
Effects in the profit or loss for the year					(742,724)	(1,076,903)	(1,411,082)

(a) The indexes were obtained from information available in the market.

(b) In compliance with CVM Instruction 475/08, the percentages of increase were applied to the indexes in the probable scenario.

Additionally, the debts exposed to fixed indexes would generate an expense of R\$ 62,048.

e) Credit risk

a) Valuation of financial instruments

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from Consumers, Concessionaires and Licensees and financial instruments. Monthly, the risk is monitored and classified according to the current exposure, considering the limit approved by Management.

Impairment losses on financial assets recognized in profit or loss are presented in note 6 – Consumers, Concessionaires and Licensees.

Consumers, Concessionaires and Licensees

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, Management also considers the factors that may influence the credit risk of its customer base.

The Group uses an allowance matrix to measure the expected credit losses of trade receivables from individual customers, which comprise a very large number of small balances.

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Loss rates are based on actual credit loss experience over the past years. These rates reflect differences between economic conditions during the period over which the historical data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

At December 31, 2018, the maximum exposure to credit risk for trade receivables by type of counterparty was represented by the total recorded balance presented in 6 – Consumers, Concessionaires and Licensees.

Cash and cash equivalents

The Group limits its exposure to credit risk by investing only in liquid debt securities and only with counterparties that have a credit rating of at least AA-.

The Group considers that its cash and cash equivalents have low credit risk based on the external credit ratings of the counterparties. Management did not identify for the years 2017 and 2018 that the securities were impaired, based in the criteria of expected losses.

f) Liquidity analysis

The Company manages liquidity risk by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of its financial liabilities. The table below sets out details of the contractual maturities of the financial liabilities at December 31, 2018, taking into account principal and future interest, and is based on the undiscounted cash flow, considering the earliest date on which the Group have to settle their respective obligations.

December 31, 2018	Note	Less than 1 month	1-3 months	3 months to 1 year	1-3 years	4-5 years	More than 5 years	Total
Trade payables	15	2,368,142	29,618	325	194,898	-	138,138	2,731,121
Borrowings - principal and interest	16	204,626	686,531	2,235,355	5,630,763	2,762,770	2,765,395	14,285,440
Derivatives	33	-	32	9,908	15,695	10,327	-	35,962
Debentures - principal and	17	81,852	450,576	1,009,204	5,871,723	2,349,058	1,196,565	10,958,978

interest								
Regulatory								
charges	19	149,159	1,497	-	-	-	-	150,656
Use of public								
asset		782	4,435	15,715	36,137	48,193	147,643	252,905
Others	22	83,372	92,414	50,208	3,054	3,054	56,050	288,150
Consumers and								
concessionaires		43,022	42,992	7,598	-	-	47,831	141,443
EPE / FNDCT /								
PROCEL		35	4,336	33,682	-	-	-	38,052
Collections								
agreement		40,188	44,831	-	-	-	-	85,018
Reversal fund		127	255	1,330	3,054	3,054	8,219	16,039
Business								
combination		-	-	7,598	-	-	-	7,598
Total		2,887,933	1,265,103	3,320,715	11,752,270	5,173,402	4,303,791	28,703,212

(34) NON-CASH TRANSACTIONS

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	December 31, 2018	December 31, 2017	December 31, 2016
Transactions resulting from business combinations			
Borrowings and debentures	-	-	(1,156,621)
Concession financial asset	-	(12,338)	876,281
Intangible asset	-	(22,165)	1,870,268
Property, plant and equipment	-	(4,800)	-
Other net assets acquired	-	-	1,911
	-	(39,303)	1,591,839
Cash and cash equivalents acquired in the business combination	-	-	(95,164)
Consideration paid in the acquisition, net	-	(39,303)	1,496,675
Other transactions			
Capital increase through earnings reserves	-	-	392,272
Escrow deposits to property, plant and equipment	-	4	3,418
Interest capitalized in property, plant and equipment	10,591	29,817	54,744
Interest capitalized in concession intangible asset - distribution infraestructure	18,015	20,726	13,349
Reversal of contingencies against intangible assets	-	-	7,591
Repayment of intercompany loans with of noncontrolling shareholders' dividends	377	259	-
Provision for environmental costs capitalized in property, plant and equipment	1,684	41,213	-
Transfers between property, plant and equipment and other assets	5,515	32,600	14,592

(35) COMMITMENTS

The Group's commitments, mainly related to long term agreements for energy purchases and power plants constructions, at December 31, 2018 are as follows:

Commitments at December 31, 2018	Duration	Less than 1 year	1-3 years	4-5 years	More than 5 years	Total
Rentals	Up to 9 years	8,973	13,671	13,041	10,003	45,688
Energy purchase agreements (except Itaipu)	Up to 26 years	11,799,846	20,935,148	21,321,793	53,391,392	107,448,179
Energy purchase from Itaipu	Up to 26 years	2,726,836	5,474,503	5,740,138	18,536,806	32,478,283
Energy system service charges	Up to 31 years	2,461,362	6,499,568	8,296,273	30,353,340	47,610,543
GSF renegotiation	Up to 29 years	7,580	43,696	52,356	312,498	416,130
Power plant construction projects	Up to 2 years	39,459	2,028	-	-	41,487
Trade payables	Up to 16 years	125,394	280,971	316,999	1,500,320	2,223,684

Other commitments related to the operation of concessions	Up to 14 years	13,408	28,636	31,529	186,980	260,553
Total		17,182,858	33,278,221	35,772,129	104,291,339	190,524,547

The power plant construction projects include commitments made basically to construction related to the subsidiaries of the renewable energy segment.

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(36) CONDENSED UNCONSOLIDATED FINANCIAL INFORMATION

Since the condensed unconsolidated financial information required by Rule 12-04 of Regulation S-X is not required under IFRS issued by the International Accounting Standards Board - IASB, such information was not included in the original financial statements filed with the Brazilian Securities and Exchange Commissions – CVM. In order to attend the specific requirements of the Securities and Exchange Commission (the “SEC”), Management has incorporated the condensed unconsolidated information in these financial statements as part of the Form 20-F.

The condensed unconsolidated financial information of CPFL Energia, as of December 31, 2018 and December 31, 2017 and income statements for the years ended on December 31, 2018, 2017 and 2016 presented herein was prepared considering the same accounting policies as described in note 3 to Company’s consolidated financial statements.

UNCONSOLIDATED STATEMENTS OF FINANCIAL POSITION

ASSETS	December 31, 2018	December 31, 2017
Cash and cash equivalents	79,364	6,581
Dividends and interest on capital	701,731	204,807
Other receivables	18,504	63,994
Total current assets	799,599	275,383
Deferred tax assets	112,522	145,779
Investments	9,816,139	8,557,673
Other receivables	79,693	484,814
Total noncurrent assets	10,008,354	9,188,265
Total assets	10,807,954	9,463,648
LIABILITIES	December 31, 2018	December 31, 2017
Debentures	-	1,938
Dividends and interest on capital	491,602	281,919
Other payables	39,778	19,955
f) Liquidity analysis		494

Total current liabilities	531,380	303,812
Debtentures	-	184,388
Provision for tax, civil and labor risks	241	600
Other payables	13,584	13,320
Total noncurrent liabilities	13,825	198,307
Equity	10,262,749	8,961,528
Total liabilities and equity	10,807,954	9,463,648

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UNCONSOLIDATED STATEMENTS OF PROFIT OR LOSS FOR THE YEAR

	2018	2017	2016
Net operating revenue	1	1	1,713
General and administrative expenses	(43,930)	(42,771)	(50,860)
Other operating expenses	9	-	-
Income from electric energy service	(43,920)	(42,770)	(49,147)
Equity interests in subsidiaries, associates and joint ventures	2,250,835	1,349,766	922,362
Finance income (expenses)	(27,300)	(56,471)	17,183
Profit before taxes	2,179,615	1,250,525	890,398
Social contribution and income tax	(121,575)	(70,775)	10,487
Profit for the year	2,058,040	1,179,750	900,885

	2018	2017	2016
Profit for the year	2,058,040	1,179,750	900,885
Items that will not be reclassified subsequently to profit and loss			
Equity in comprehensive income of subsidiaries	(238,780)	96,000	(394,175)
Items that will be reclassified subsequently to profit and loss			
Equity in comprehensive income of subsidiaries	17,963	-	-
Total comprehensive income for the year	1,837,223	1,275,750	506,710

UNCONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEAR

	2018	2017	2016
OPERATING CASH FLOW			
Profit before taxes	2,179,615	1,250,525	890,398
ADJUSTMENT TO RECONCILE PROFIT TO CASH FROM OPERATING ACTIVITIES			
Depreciation and amortization	201	217	193
Provision for tax, civil and labor risks	(117)	61	425
Interest on debts, inflation adjustment and exchange rate changes	2,932	61,520	42,395
Equity interests in subsidiaries, associates and joint ventures	(2,250,835)	(1,349,766)	(922,362)
	(68,204)	(37,443)	11,049
DECREASE (INCREASE) IN OPERATING ASSETS AND LIABILITIES			
Dividends and interest on capital received	596,100	1,172,336	1,606,073
Taxes recoverable	109,719	65,182	3,261
Other operating assets and liabilities	13,021	(19,043)	8,459

f) Liquidity analysis

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CASH FLOWS PROVIDED BY OPERATIONS	650,636	1,181,032	1,628,842
Interest paid on debts and debentures	(4,235)	(71,844)	(45,470)
Income tax and social contribution paid	(80,234)	(47,438)	(27,117)
NET CASH FROM OPERATING ACTIVITIES	566,167	1,061,750	1,556,255
INVESTING ACTIVITIES			
Capital increase in investees	-	(9,400)	-
Advance for future capital increases	(82,415)	(383,340)	(1,384,520)
Other investing activities	54,132	(72,435)	(42,178)
NET CASH USED IN INVESTING ACTIVITIES	(28,283)	(465,175)	(1,426,698)
FINANCING ACTIVITIES			
Borrowings and debentures raised	-	-	609,060
Repayment of principal of borrowings and debentures	(186,000)	(434,000)	(888,408)
Repayment of derivatives	-	-	(4,711)
Dividends and interest on capital paid	(279,101)	(220,966)	(204,717)
NET CASH GENERATED BY (USED IN) FINANCING ACTIVITIES	(465,101)	(654,966)	(488,776)
NET INCREASE IN CASH AND CASH EQUIVALENTS	72,783	(58,390)	(359,218)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	6,581	64,973	424,192
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	79,364	6,581	64,974

Following is the information relating to CPFL Energia's unconsolidated condensed financial statements presented above:

a. Cash and cash equivalents:

	December 31, 2018	December 31, 2017
Bank balances	2,824	508
Investment funds	76,540	6,073
Total	79,364	6,580

Amounts invested in an Investment funds, involving investments subject to floating rates tied to the CDI in federal government bonds, CDBs, secured debentures of major financial institutions, with daily liquidity, low credit risk and interest equivalent, on average, to 100.3% of CDI.

b. Dividends and interest on equity:

Subsidiary	Dividend December 31, 2018	Interest on own capital		Total		December 31, 2017
	December 31, 2017	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017	
CPFL Paulista	92,596	49,798	110,214	-	202,810	49,798
CPFL Piratininga	6,226	-	31,708	-	37,934	-
CPFL Santa Cruz	-	24,918	19,160	13,960	19,160	38,878
RGE (*)	-	50,319	-	-	-	50,319
RGE Sul	26,795	-	94,312	-	121,107	-
CPFL Geração	71,099	-	102,436	-	173,535	-
CPFL Centrais Geradoras	815	17	-	-	815	17
CPFL Jaguari Geração	3,398	-	-	-	3,398	-
CPFL Brasil	111,083	20,748	2,451	2,361	113,534	23,109
CPFL Planalto	-	888	-	-	-	888
CPFL Atende	-	1,003	876	620	876	1,623
Nect	-	4,348	-	-	-	4,348
CPFL Telecom	1,111	-	-	-	1,111	-
CPFL Eficiência Energética	12,195	12,195	15,104	17,404	27,299	29,599
Authi	151	6,228	-	-	151	6,228

f) Liquidity analysis

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325,469 170,461 376,261 34,344 701,730 204,807

(*) In December 31, 2018 this subsidiary was merged into RGE SUL

c. Other receivables:

	Current		Noncurrent	
	December	December	December	December
	31,	31,	31,	31,
	2018	2017	2018	2017
Income tax and social contribution recoverable	9,441	17,051	-	-
Other taxes recoverable	8,646	46,699	-	-
Associates and subsidiaries	-	-	72,933	127,147
Escrow deposits	-	-	703	665
Advance for future capital increase	-	-	-	350,000
Loans and financing guarantees of subsidiaries	-	-	4,863	5,761
Others	417	243	1,197	1,241
Total	18,504	63,994	79,693	484,814

In April, 2018, all the balance of advance for future capital increase comprised advances to CPFL Paulista in the amount of R\$350,000, was capitalized.

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d. Deferred tax assets

	December 31, 2018	December 31, 2017
<u>Social contribution credit (debit)</u>		
Tax losses carryforwards	29,750	38,216
Temporarily nondeductible differences	(355)	(408)
Subtotal	29,395	37,808
<u>Income tax credit (debit)</u>		
Tax losses carryforwards	84,113	109,103
Temporarily nondeductible differences	(986)	(1,132)
Subtotal	83,127	107,971
Total	112,522	145,779

e. Investment:

The financial information of subsidiaries and joint ventures are accounted for using the equity method of accounting.

Investment	Number of shares (thousand)	December		2018	2017
		31, 2018	31, 2017		
CPFL Paulista	880,653	1,910,866	1,370,403	649,516	280,355
CPFL Piratininga	53,096,770	516,235	461,059	182,654	152,080
CPFL Santa Cruz	-	-	-	-	23,441
CPFL Leste Paulista	-	-	-	-	9,583
CPFL Sul Paulista	-	-	-	-	10,544
Companhia Jaguari de Energia (CPFL Santa Cruz)	359,058	392,040	340,463	81,191	11,720
CPFL Mococa	-	-	-	-	6,999
RGE	-	-	1,680,334	232,731	117,700
RGE Sul (RGE)	1,125	3,286,587	1,228,317	255,854	57,300
CPFL Geração	205,492,020	2,625,465	2,354,115	766,451	594,020
CPFL Jaguari Geração (*)	40,108	58,656	50,970	13,592	15,700
CPFL Brasil	3,000	72,680	96,093	91,502	94,450
CPFL Planalto (*)	630	2,444	3,293	3,567	3,550
CPFL Serviços	1,564,844	120,929	105,105	(24,076)	(12,863)
CPFL Atende (*)	13,991	19,363	19,338	9,527	7,120
Nect (*)	2,059	16,558	15,515	19,087	17,390
CPFL Total (*)	9,005	19,953	20,624	21,690	20,860
CPFL Jaguariuna (*)	-	-	-	-	(8,360)
CPFL Telecom	119,780	5,465	2,018	4,442	(14,021)
CPFL Centrais Geradoras	16,128	15,998	16,177	618	730

f) Liquidity analysis

CPFL Eficiência Energética	48,164	85,744	55,252	(11,908)	(2,582)
Authi (*)	10	21,463	18,694	28,604	24,911
Subtotal - by subsidiary's equity		9,170,444	7,837,770	2,325,042	1,410,688
Amortization of fair value adjustment of assets		-	-	(74,207)	(60,918)
Total		9,170,444	7,837,770	2,250,835	1,349,769
Investment		9,088,049	7,804,429		
Advances for future capital increases		82,395	33,340		

(*) number of quotas

As of December 31, 2018, the balances of advances for future capital increase ("AFAC") refer to funds granted by the Company mainly to the subsidiaries CPFL Eficiência (R\$ 42,400) and CPFL Serviços (R\$ 39,900). As of December 31, 2017 the balance refers to AFACs to the subsidiary CPFL Telecom (R\$ 33,340).

Dividends and interest on own capital received

The net cash provided by operating activities is comprised mainly by dividends and interest on own capital received from the Company's subsidiaries.

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After the decisions made by the subsidiaries' shareholders at their Annual and Extraordinary General Meetings (AGM/EGM), in 2018 the Company recognized the amount of R\$ 576,247 by way of dividends and interest on capital for the year 2017. The subsidiaries also declared in 2018: (i) interim dividends and interest on capital of R\$ 29,046, related to interim profit of 2018; (ii) R\$ 361,158 of interest on capital for the year 2018; and (iii) R\$ 126,574 as minimum mandatory dividend receivable related to 2018.

Of the amounts recorded as receivables, the amount of R\$596,100 was paid to the Company by the subsidiaries in 2018.

The dividends received are comprised as follows:

	2018	2017	2016
CPFL Paulista	100,120	2,228	948,624
CPFL Piratininga	28,445	112,638	267,647
CPFL Santa Cruz	-	8,427	40,009
CPFL Leste Paulista	-	4,449	9,242
Companhia Jaguari de Energia (CPFL Santa Cruz)	45,770	-	1,291
CPFL Mococa	-	-	7,991
RGE	23,525	24,672	172,432
CPFL Geração	298,511	779,533	110,532
CPFL Brasil	2,859	166,695	1,601
CPFL Jaguari Geração	2,508	11,061	4,288
CPFL Planalto	5,304	1,471	2,835
CPFL Serviços	-	-	-
CPFL Atende	10,094	5,666	3,382
CPFL Total	22,361	17,810	10,767
Nect	22,392	13,424	18,155
CPFL Centrais Geradoras	-	-	4,740
CPFL Eficiência Energética	2,300	-	-
Authi	31,912	24,264	2,537
TOTAL	596,100	1,172,336	1,606,073

f. Interest on debentures:

	December 31, 2018		December 31, 2017	
	Total	Current and noncurrent interest	Noncurrent principal	Total
5th Issue Single series	-	2,817	186,000	188,817

In the first quarter of 2018, the company prepaid all debentures for CPFL Energia.

g. Other payables:

The mainly accounts payable that the parent company has registered as noncurrent liabilities are due to loans and financing guarantees for subsidiaries and profit sharing of the Executive Officers.

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