Tractebel Energia



Results Presentation
4Q15 and 2015

Disclaimer

The information contained herein has been prepared by Tractebel Energia S.A. ("Tractebel Energia", "Tractebel" or "the Company") solely for meetings to be held with investors and/or potential investors. This material does not constitute offering material in whole or part, and you must obtain further information before making an investment decision in respect of the common shares of the Company.

This material has been prepared solely for informational purposes and is not to be construed as a solicitation or an offer to buy or sell any securities and should not be treated as giving investment advice. It is not targeted to the specific investment objectives, financial situation or particular needs of any recipient. No representation or warranty, either express or implied, is made as to the accuracy, completeness or reliability of the information contained herein. It should not be regarded by recipients as a substitute for the exercise of their own judgment. Any opinions expressed in this material are subject to change without notice and Tractebel Energia is not under obligation to update or keep current the information contained herein.

The Company and their respective affiliates, agents, directors, partners and employees accept no liability whatsoever for any loss or damage of any kind arising out of the use of all or any part of this material.

You should consult your own legal, regulatory, tax, business, investment, financial and accounting advisers to the extent that you deem necessary, and you must make your own investment, hedging or trading decision based upon your own judgment and advice from such advisers as you deem necessary and not upon any view expressed in this material.

This material includes forward-looking statements subject to risks and uncertainties, which are based on current expectations and projections about future events and trends that may affect the Company's business. These statements include projections of economic growth and energy demand and supply, as well as information about competitive position, the regulatory environment, potential opportunities for growth and other matters. Several factors may adversely affect the estimates and assumptions on which these statements are based, many of which are beyond our control.

01

Highlights, Shareholding Structure, Market Share, Assets and Sales



Highlights

Main financial and operational indexes:

(in R$ million)	4Q15	4Q14	Chg.	2015	2014	Chg.
Net Revenue from Sales (NRS)	1,709.2	1,728.1	-1.1%	6,512.0	6,472.5	0.6%
Results from Operations (EBIT)	805.1	733.8	9.7%	2,503.8	2,302.9	8.7%
EBITDA [1]	967.0	884.1	9.4%	3,114.6	2,895.1	7.6%
EBITDA / NRS - (%)[1]	56.6	51.2	5.4 p.p.	47.8	44.7	3.1 p.p.
Net Income	599.7	481.9	24.4%	1,501.3	1,383.1	8.5%
Net Debt [2]	1,214.8	2,237.8	-45.7%	1,214.8	2,237.8	-45.7%
Power Production (avg MW) [3]	5,902	5,937	-0.6%	5,436	5,586	-2.7%
Energy Sold (avg MW)	4,099	4,337	-5.5%	4,111	4,232	-2.9%
Average Net Sales Price (R$/MWh) [4]	175.26	152.17	15.2%	171.37	149.20	14.9%
Number of Employees	1,168	1,174	-0.5%	1,168	1,174	-0.5%

Notes:
[1] EBITDA represents: net income + income tax and social contribution + financial results + depreciation and amortization.
[2] Adjusted amount, net of gains from hedge operations.
[3] Total electricity output from the plants operated by Tractebel Energia.
[4] Net of taxes and exports.

Highlights (cont'd)

For the 11th consecutive year, Tractebel Energia was included in BM&FBovespa's Corporate Sustainability Index (ISE) one of the 10 companies that have comprised the ISE since inception.

In December 2015, Fitch Ratings downgraded the Company's International Rating from BBB to BBB- with negative outlook, as a consequence of the downgrading in the Brazilian classification. The Tractebel's Local Long Term Rating stands at 'AAA(bra)', with a stable outlook.

To align its visual identity to that of its parent company, ENGIE, the Company has been using a new logo.

The Brazilian Electricity Regulatory Agency (Aneel) approved the Company's adherence to the hydrological risk renegotiation.

The Company was ranked second in the 17th Abrasca Best Annual Report Award, in addition to receiving an Honorable Mention for the economic and financial analysis.

Highlights (cont'd)

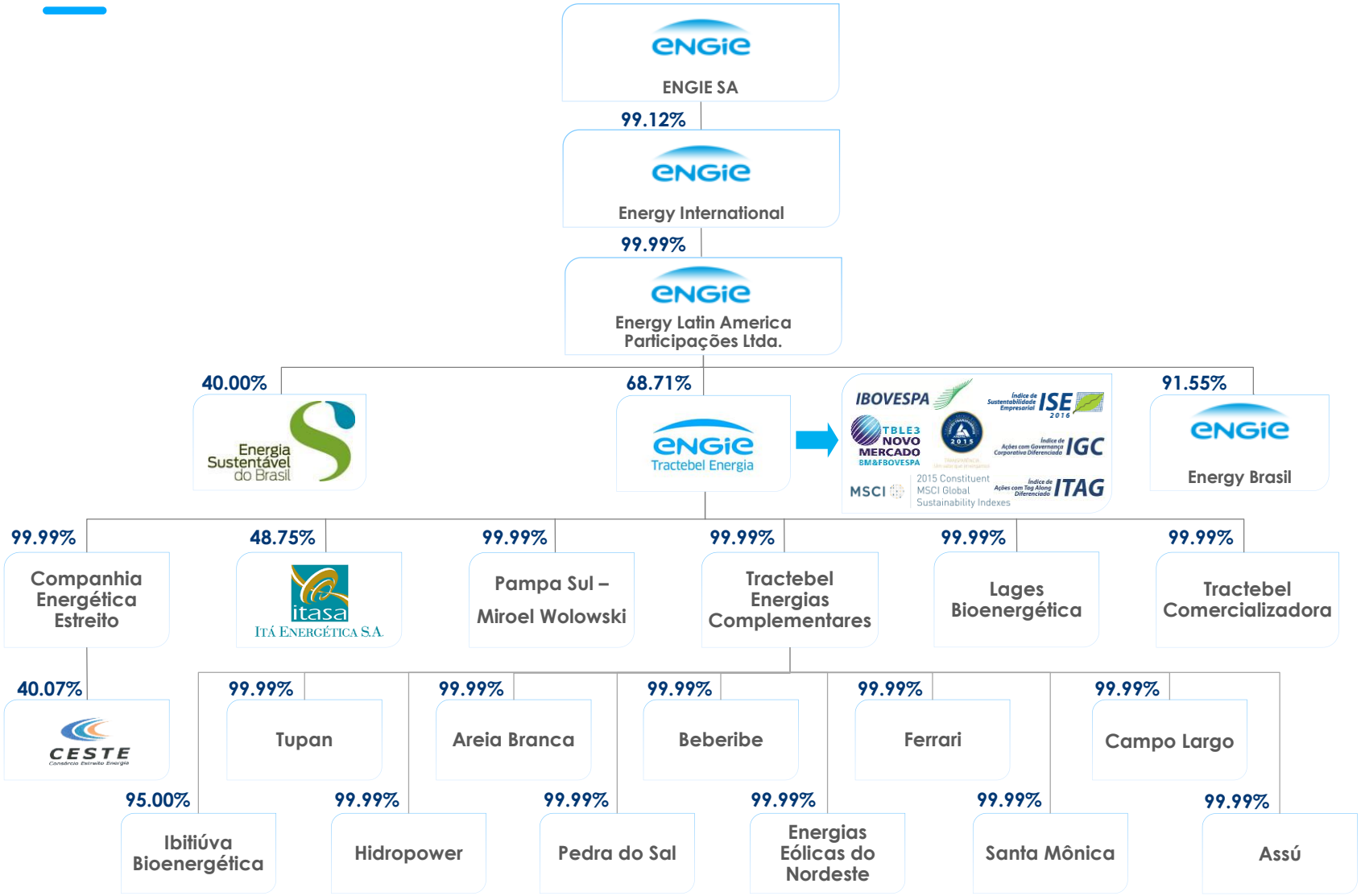
For the second consecutive time, the Company was recognized by the Brazilian Institute for Ethics in Business as an outstanding institution in the Most Ethical Companies in Brazil Ranking.

In November, the Company sold 9.2 average MW for R$ 302.99/MWh of solar energy at the 2015 Second Reserve Energy Auction for a 20 year term, delivery to begin in 2018, the energy to be generated from the Assú V Photovoltaic Plant.

The Board of Directors has approved the proposal of net income allocation, to be ratified by the Annual General Meeting, considering a capital increase of R$ 290.5 million and complementary dividends of R$ 209.5 million (R$ 0.3210/share).

In February 2016, Standard & Poor's downgraded the Company's rating on the Brazil National Scale from 'brAAA' to 'brAA' - the former rating of which had been reassigned in December 2015-, in the light of the Brazilian sovereign risk downgrade to 'brAA-'.

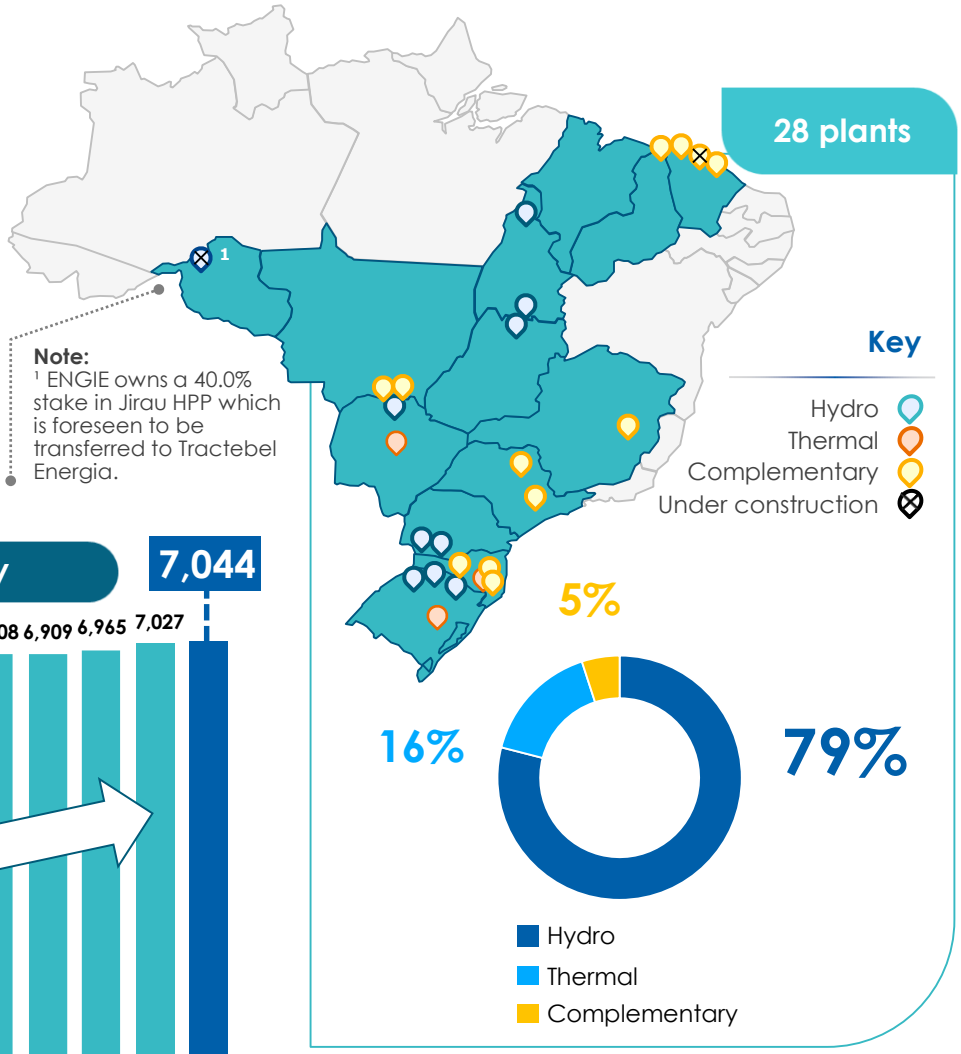
Shareholding structure of Tractebel Energia

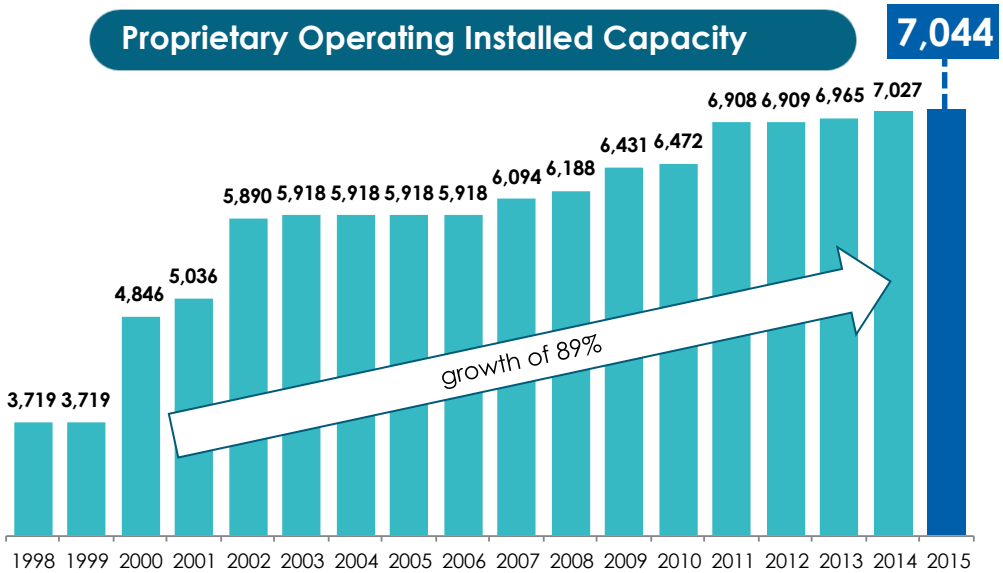


Simplified version

Diversified portfolio of assets, with strategic location

Own installed capacity of
7,044.3 MW from
28 plants
operated by the Company in a
diversified portfolio

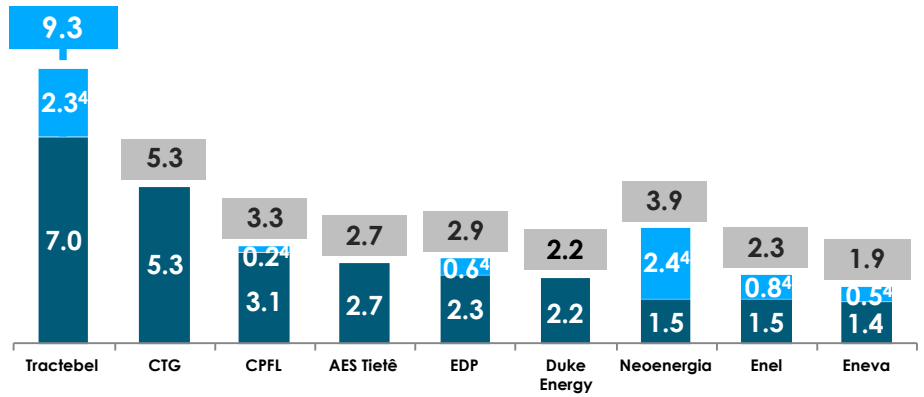




Leading position in the generating sector

Tractebel Energia is the largest private player in the Brazilian generating market...

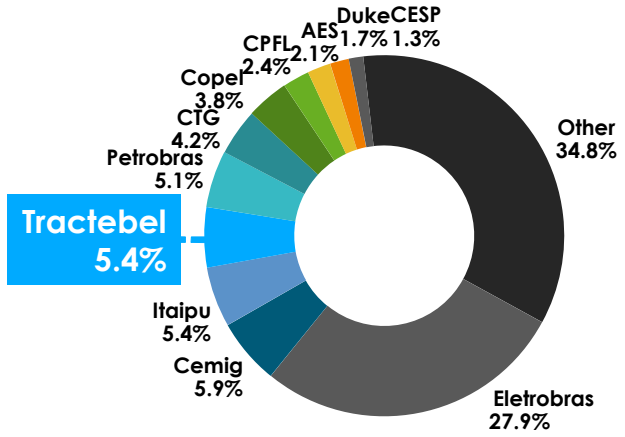
Private Sector – Installed Capacity[1] (GW)



Source: Aneel, Companies' websites and in-house studies.

Notes:
[1] Apparent sum-related errors are a result from rounding of addends.
[2] Amount corresponding to SIN – National Interlinked System.
[3] Includes only the Brazilian part of Itaipu.
[4] Installed capacity under construction based on information from Aneel, ONS and internal study. For Tractebel, the figure includes the plants under construction according to slide 39 of this presentation.

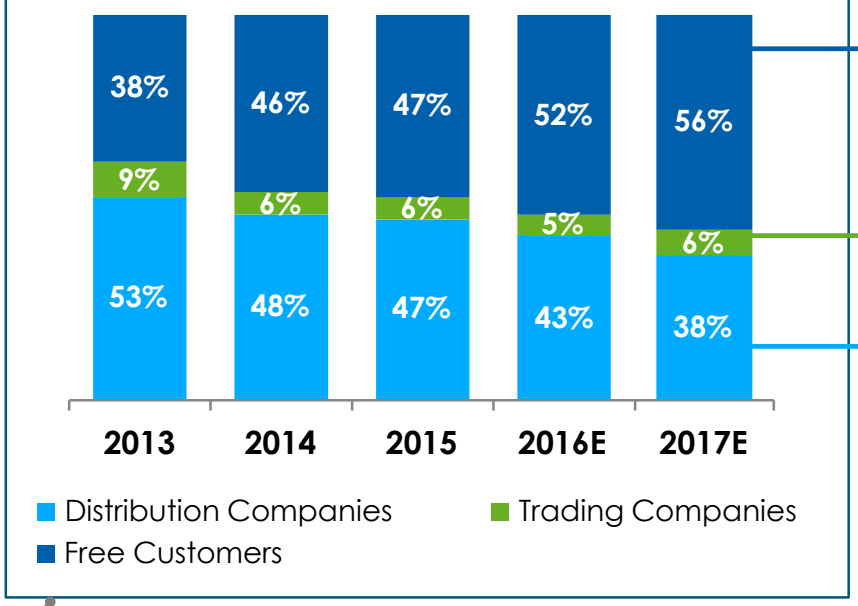
Brazil – Existing Installed Capacity[2,3]



...and is well positioned to capture business opportunities.

Diversified portfolio among distribution, free customers and trading companies

Client Breakdown (based on contracted energy)[1]



Note:
[1] The figures have been reclassified. Effective in the 3Q12, the Company is now showing sales to the trading companies which allocate purchased energy exclusively to their production units as sales to free consumers and no longer to trading companies.

First to consistently serve the free market…

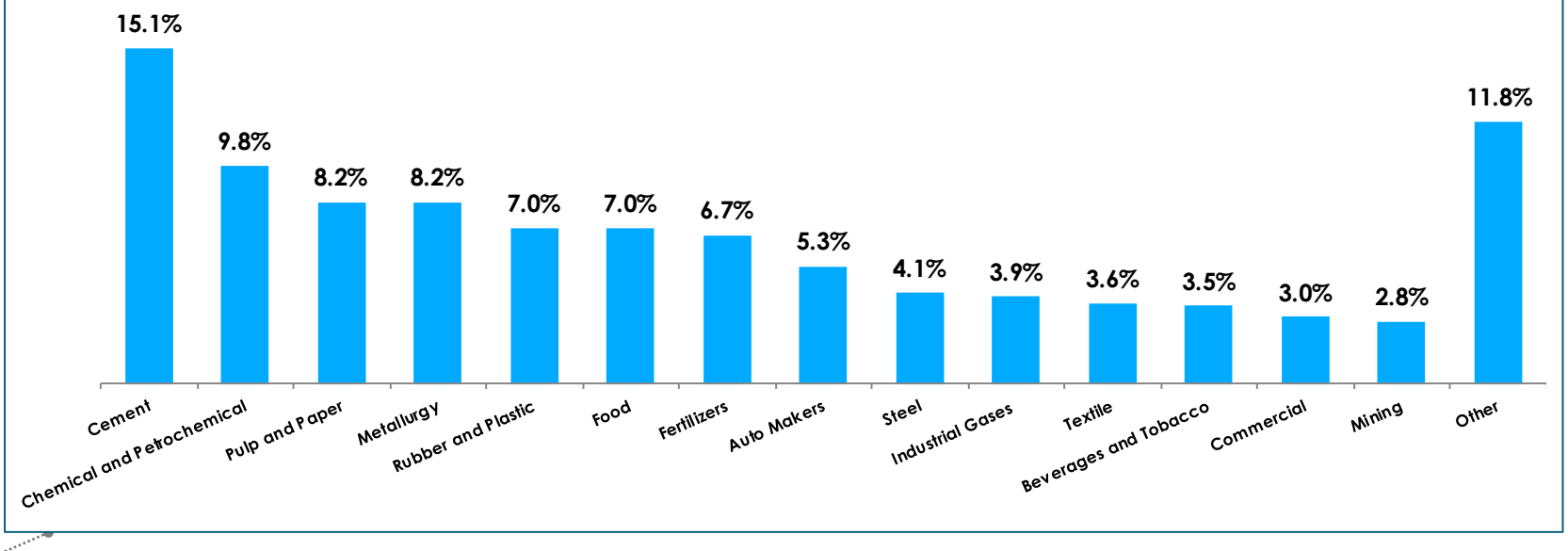
- Flexibility (prices, terms and conditions) → Maximizes portfolio's efficiency
- Opportunistic contracts (purchase/sale) → Product assembly
- Largest consumer market
- Regulated and unregulated contracts → Long-term cash flow predictability

…to minimize risks and to maximize portfolio's efficiency.

Diversification also within the free customers portfolio

Free customer industry diversification and a strict credit assessment policy allow for a zero default reality

Free customers total sales volume for 2016: 2,126 average MW



Source: Internal study based on IBGE's classification.

02

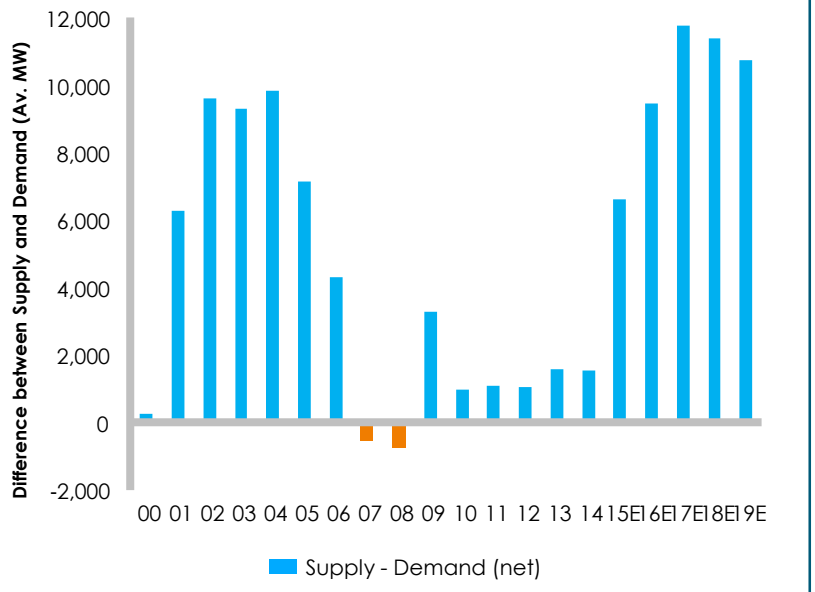
Energy Market In Brazil



Decline in demand brings theoretical improvement in the short term energy balance

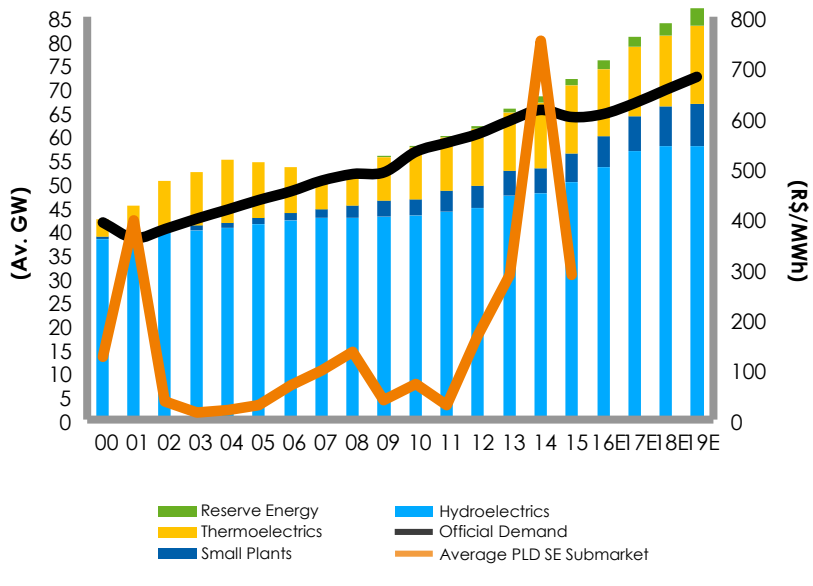
However, long term price support will be maintained due to the increased share of thermoelectric generation in the energy matrix and its dispatch to guarantee supplies to the system, delays in the implementation of projects, priority given to the construction of run-of-river hydroelectric plants, cost pressures following the recent devaluation of the Real and income redistribution.

Energy Market



Source: Tractebel Energia internal study based on the Monthly Operations Plan (PMO) for January 2016.

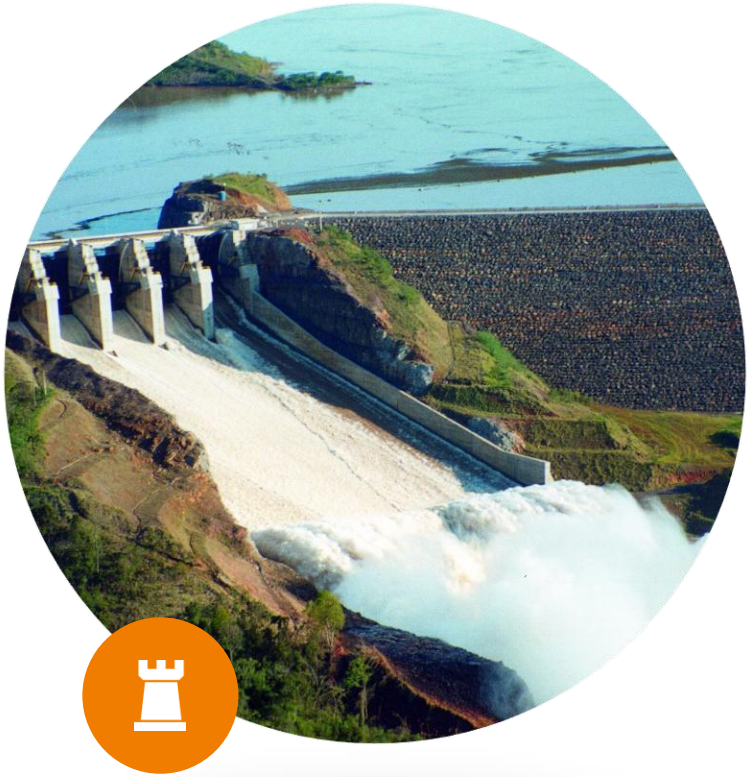
Distribution of Supply by Source



Source: Internal study based on ANEEL and ONS data.

03

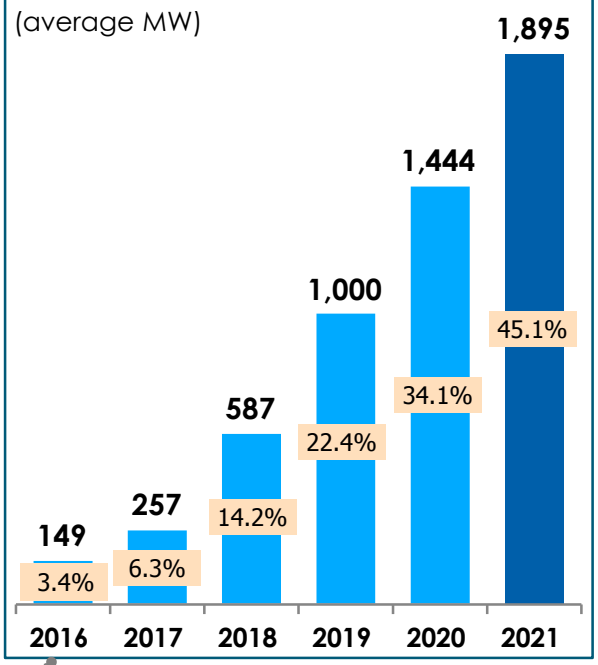
Sales Strategy



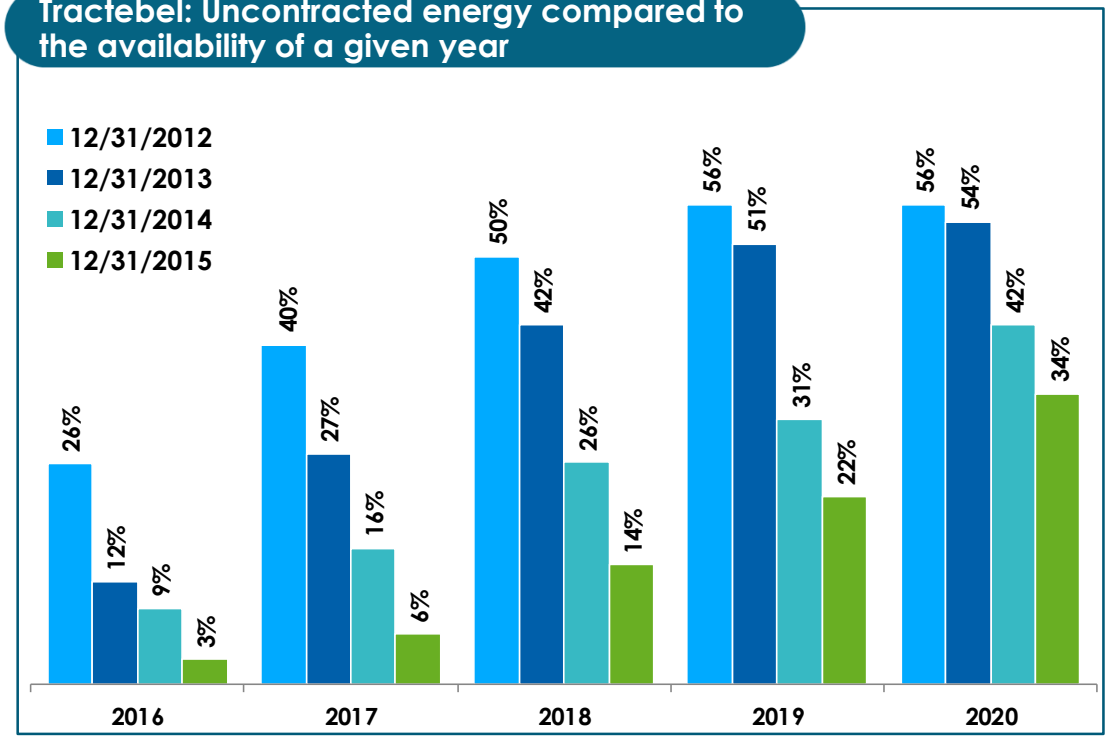
Tractebel`s commercial strategy considers the gradual sale of future availability

As the time goes by, the Company is able to better foresee the market conditions in a given year ahead and, as a result, to fine-tune the amount of uncontracted energy.

Tractebel Energia's uncontracted energy[1]



Tractebel: Uncontracted energy compared to the availability of a given year



Note:
[1] Percentage of total resources.

Energy balance

As of December 31, 2015

(in average MW)	2016	2017	2018	2019	2020	2021	Auction **Gross** Price (R$/MWh)	Reference Date	**Gross** Price Adjusted as of 12/31/2015 (R$/MWh)
Own Resources	3,549	3,542	3,584	4,005	3,997	4,006			
+ Purchases for Resale	816	560	547	455	237	200			
= Total Resources (A)	**4,365**	**4,102**	**4,131**	**4,460**	**4,234**	**4,206**			
Government Auction Sales*	1,681	1,323	1,369	1,756	1,603	1,603			
2005-EE-2009-08	353	-	-	-	-	-	94.0	Oct-05	160.7
2005-NE-2010-30	200	200	200	200	200	200	115.1	Dec-05	194.5
2006-NE-2009-30	493	493	493	493	493	493	128.4	Jun-06	213.5
2006-NE-2011-30	148	148	148	148	148	148	135.0	Nov-06	223.4
2007-NE-2012-30	256	256	256	256	256	256	126.6	Oct-07	200.6
2014-EE-2014-06	150	150	150	150	-	-	270.7	May-14	292.8
Proinfa	44	44	44	44	44	44	147.8	Jun-04	279.4
1st Reserve Energy Auction	14	14	14	14	14	14	158.1	Aug-08	230.5
Auction Mix (New Energy / Reserve / DG)	18	18	18	17	14	14	-	-	217.9
2014-NE-2019-25	-	-	-	295	295	295	183.5	Nov-14	204.6
2014-NE-2019-25	-	-	-	10	10	10	206.2	Nov-14	230.0
2014-NE-2019-20	-	-	-	83	83	83	139.3	Nov-14	155.4
2015-EE-2016-01	5	-	-	-	-	-	169.4	Dec-15	169.4
2015-NE-2018-20	-	-	46	46	46	46	188.5	Aug-15	194.8
+ Bilateral Sales	2,535	2,522	2,175	1,704	1,187	708			
= Total Sales (B)	**4,216**	**3,845**	**3,544**	**3,460**	**2,790**	**2,311**			
Balance (A - B)	**149**	**257**	**587**	**1,000**	**1,444**	**1,895**			
Sales Average Price (R$/MWh) **(Net)**[*1]:	172.9	168.0	167.2						
Purchases Average Price (R$/MWh) **(Net)**[*2]:	200.7	187.9	198.0						

* XXXX-YY-WWWW-ZZ, where:
XXXX -> year of auction
YY -> EE = existing energy or NE = new energy
WWWW -> year of delivery start
ZZ -> supply contract duration (in years)

*1: Sales price is net of ICMS and taxes over revenue (PIS/Cofins, R&D), as of 12/31/15, i.e. future inflation is not considered.
*2: Purchase net price, considering benefits from PIS/Cofins credits, as of 12/31/15, i.e. future inflation is not considered.

Notes:
- The balance refers to the settlement point.
- The average prices are considered simply estimates and are based on financial planning revisions, not capturing volume changes, which are updated quarterly.

Renegotiation of the hydrological risk

On December 31, 2015, Aneel approved the renegotiation of Tractebel´s hydrological risk as shown in the following table:

Plant	Product	Amount Renegotiated average MW	Amount Renegotiated MWh	Net unit reimbursement (R$)	Total reimbursement (R$ million)	Term* (years)
Cana Brava HPP	SP92	261.66	2,292,177	18.26	41.9	13.25
Itá HPP	SP92	336.00	2,943,360	18.26	53.7	13.25
Machadinho HPP	SP92	84.04	736,190	18.26	13.4	13.25
Ponte de Pedra HPP	SP95	123.55	1,082,315	23.80	25.8	7.17
Salto Santiago HPP	P97	150.00	1,314,000	24.36	32.0	2.92
São Salvador HPP	SP91	142.13	1,245,048	16.52	20.6	17.25
Estreito HPP	SP91	247.13	2,164,859	16.52	35.8	17.25
TOTAL		**1,344.51**	**11,777,950**		**223.1**	

*** Extension term as from January 1, 2016 for payment of the premium for reimbursement to 2015 results.**

Signing up to the renegotiation is limited to agreements negotiated within the scope of the Regulated Contracting Environment (ACR).

04

Expansion



Hydro Project under construction: **Jirau** | project update

3,750 MW project, out of which 40.0% held by ENGIE

- assured energy: 2,205 aMW

72.2% contracted under 30-year PPAs - indexed by inflation

0.8% contracted under 3-year PPAs - indexed by inflation

Balance of energy available to be sold by ENGIE, Chesf and Eletrosul

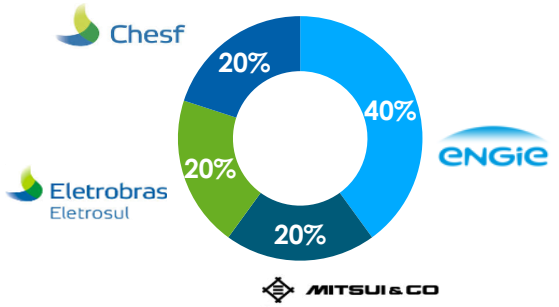
Legal decision issued in the First Instance (recognition of 535 days of force majeure)

Lawsuit remains under analysis in the second Instance

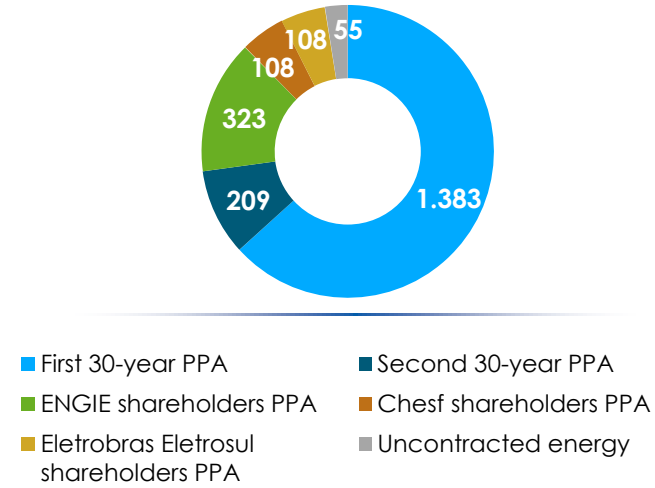
Financing conditions

- BNDES total financing: R$ 9.5 billion (initial R$ 7.2 billion + R$ 2.3 billion):
  - interest rate: TJLP + spread
  - amortization: 20 years
- spread: from 2.25% to 2.65%
- 100% of the debt is financed by BNDES, from which 50% is indirectly financed through a syndicate of banks

ESBR shareholders



ESBR PPA's portfolio aMW (2017 view)



Hydro Project under construction: **Jirau** | project update

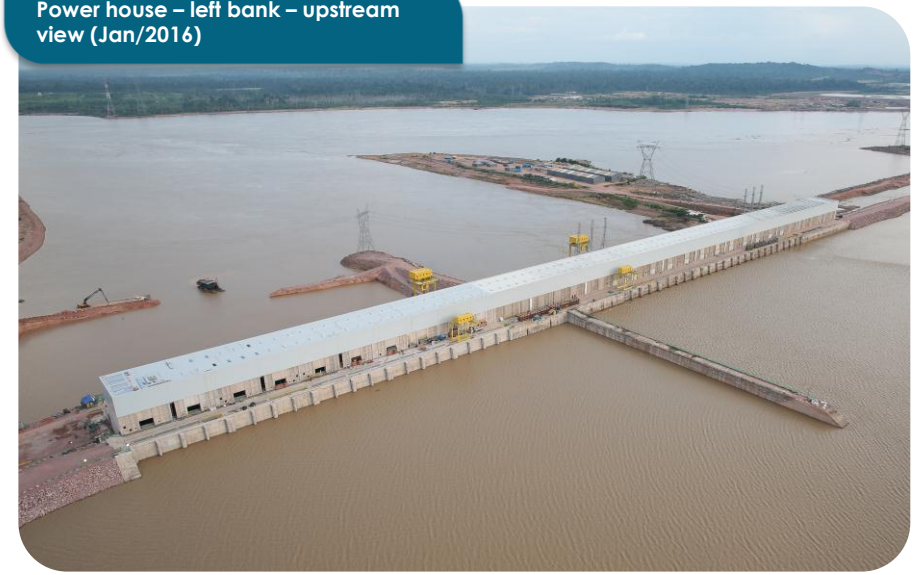
Project status

- 3,075 MW in commercial operation (41 units installed to date)
- 225 MW under assembling and commissioning phase (3 units)
- full assured energy achieved in July with the COD of the 33rd unit (Jirau HPP is fully compliant with its commercial obligations)
- full COD foreseen for second half of 2016
- additional 20.5 aMW granted by Aneel as a result of hydraulic losses revision
- highest availability among the HPPs in the National Interlinked System (SIN)

Options to create additional value

- additional assured energy through the operation of reservoir at constant levels
- additional long term tax incentives in the region

Power house – left bank – upstream view (Jan/2016)



Thermal project under construction: **Pampa Sul TPP**

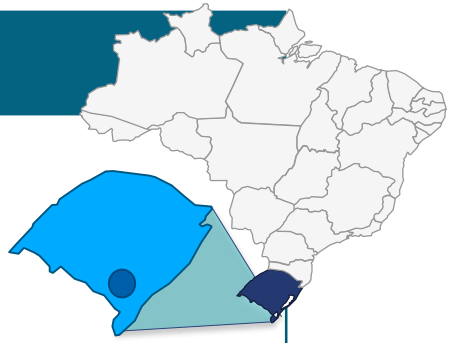
Project description

After commercializing in an A-5 Auction 294.5 avg. MW at total price of R$ 201.98/MWh for a term of 25 years, as from January 1, 2019, the Company started the construction of Pampa Sul TPP in Candiota (RS). The facility will fire thermal coal from reserves also located in Candiota.



Pampa Sul TPP under construction.

Pampa Sul TPP – RS



Installed Capacity: 340.0 MW
Commercial Capacity: 294.5 aMW
Investment (R$mm)[1]: 1,800
Start of construction: 2015
Start of operation: 2019
EPC contractor: SDEPCI
Annual Fixed Revenue (R$mm): ~ 473.3
Installation License: June 19, 2015

Note:
[1] Approximated value.

Wind project under construction: **Campo Largo Wind Complex**

Total 11 plants

Project description

In an A-5 Auction, 82.6 aMW were sold at an average total price of R$ 139.29/MWh for a term of 20 years, as from January 1, 2019. This commercial capacity will come from six wind farms which add an installed capacity of 178.2 MW.

At the same time, another five wind farms will be constructed, adding 148.5 MW (75.2 aMW), thus totaling 326.7 MW (157.8 aMW).

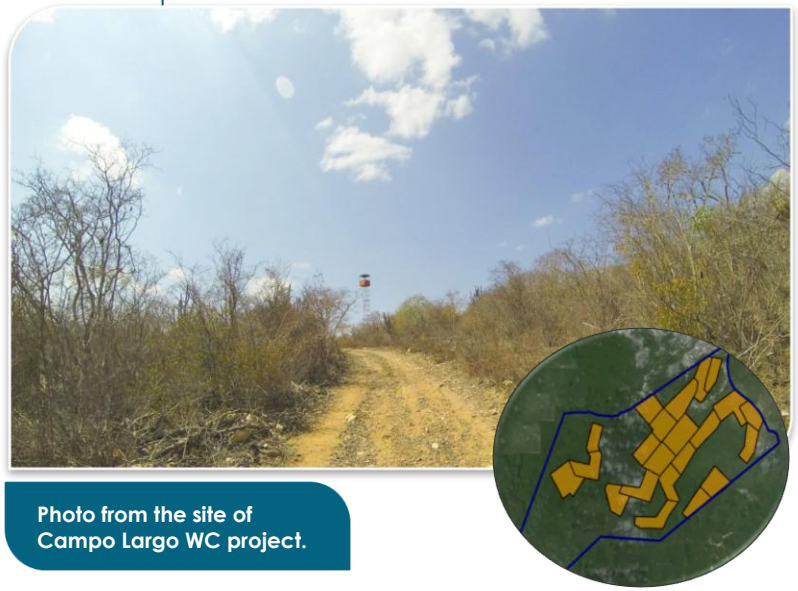
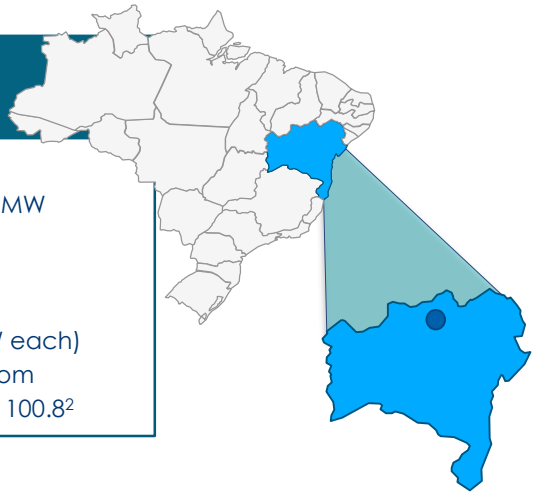


Photo from the site of Campo Largo WC project.

Campo Largo WC - BA

Installed Capacity: 326.7 MW
Commercial Capacity[1]: 157.8 aMW
Investment (R$mm)[1]: 1,700
Start of construction: 2016
Start of operation: 2019
Nº of wind turbines: 121 (2.7 MW each)
Wind turbine manufacturer: Alstom
Annual Fixed Revenue (R$mm): 100.8[2]



Note:
[1] Approximated updated value.
[2] With respect to the portion allocated to the Regulated Contracting Environment (ACR).

The Company will invest approximately R$ 1.7 billion in the Complex, whose COD is expected for 2019.

Wind project under construction: **Santa Mônica Wind Complex**

Total 4 plants

Projects description

Santa Monica Wind Complex has sold, in the last A-3 Auction, occurred on August, 21st, 46.0 aMW at an average total price of R$ 188.45/MWh for a term of 20 years from January 1, 2018.

The Complex will be comprised by four plants already under construction alongside the Trairi Wind Complex (CE).

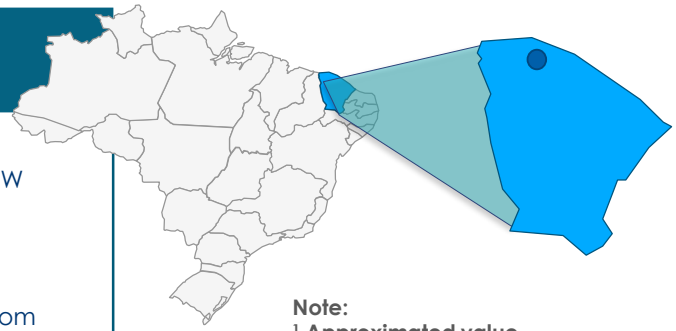




Estrela (29.7 MW)	11 wind turbines
Ouro Verde (29.7 MW)	11 wind turbines
Cacimbas (18.9 MW)	7 wind turbines
Santa Mônica (18.9 MW)	7 wind turbines

Santa Mônica WC – CE

Installed Capacity: 97.2 MW
Commercial Capacity[1]: 48.7 aMW
Investment (R$mm)[1]: 460.0
Start of construction: 2014
Start of operation: 2016
Wind turbines manufacturer: Alstom

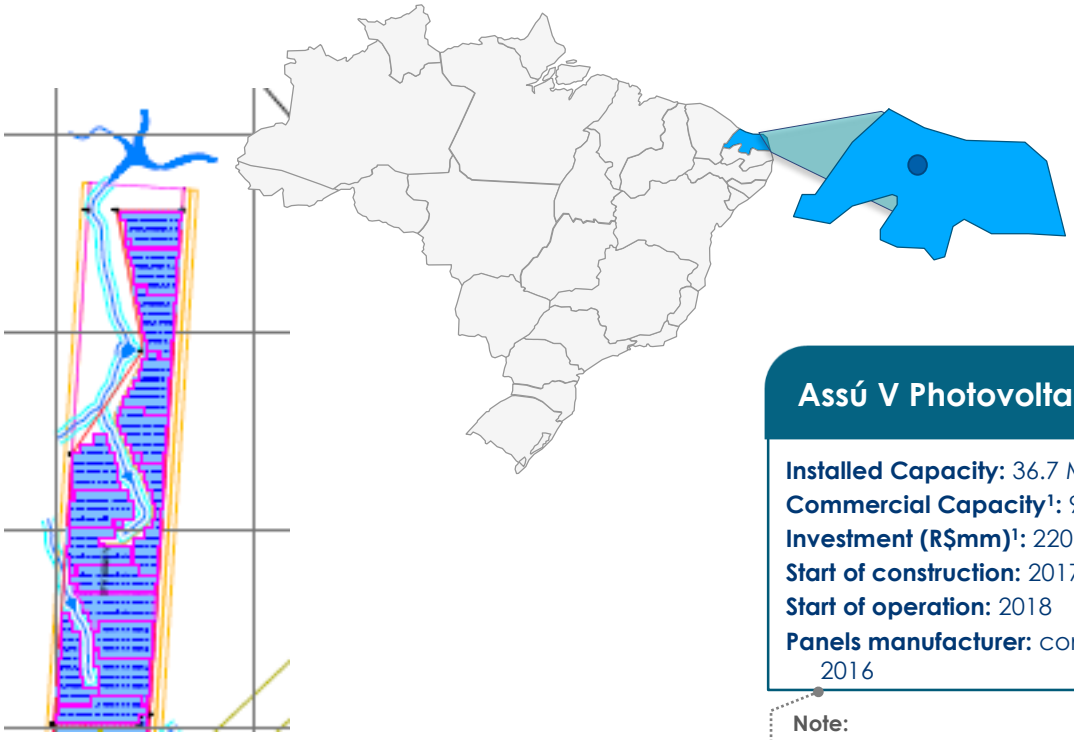


Note:
[1] Approximated value.

Solar project under construction: **Assú V Photovoltaic Central**

Project description

Assú V Photovoltaic Central commercialized, in the 2nd Reserve Auction, occurred on November, 13th, 9.2 average MW at an average total price of R$ 302.99/MWh, for a term of 20 years, from November 1st, 2018.



Assú V Photovoltaic Central – RN

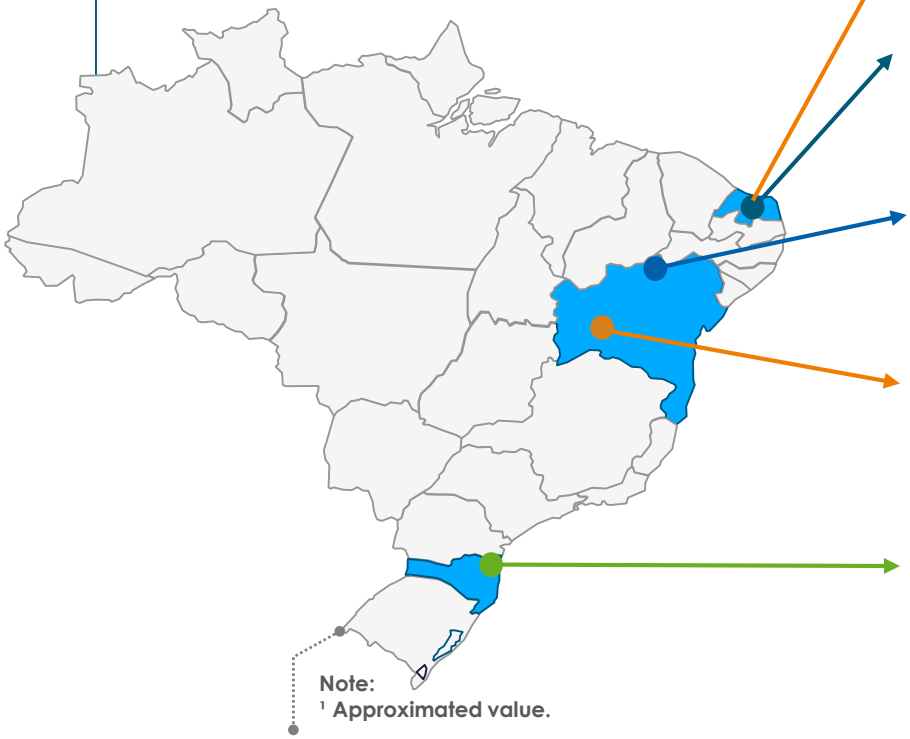
Installed Capacity: 36.7 MWp
Commercial Capacity[1]: 9.2 aMW
Investment (R$mm)[1]: 220.0
Start of construction: 2017
Start of operation: 2018
Panels manufacturer: contract to be signed until March, 2016

Note:
[1] Approximated value.

Projects under development

Tractebel has some projects in its portfolio which are currently under development. Some of them are presented below.

Projects descriptions



Note:
[1] Approximated value.

Assú I and II Photovoltaic Centrals – RN

Installed Capacity[1]: 73.3 MWp

Sto. Agostinho WC – RN

Installed Capacity: 600 MW
Commercial Capacity[1]: 300 aMW

Campo Largo WC – BA (Phase II)

Installed Capacity[1]: 300 MW
Commercial Capacity[1]: 140 aMW

Alvorada Photovoltaic Complex – BA

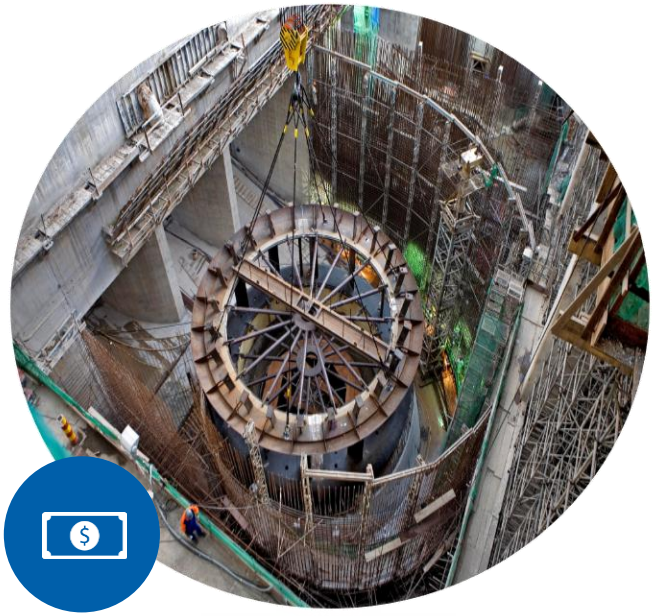
Installed Capacity[1]: up to 120 MWp

Norte Catarinense TPP – SC

Installed Capacity: 600 MW
Commercial Capacity[1]: 400 aMW
Fuel: natural gas

05

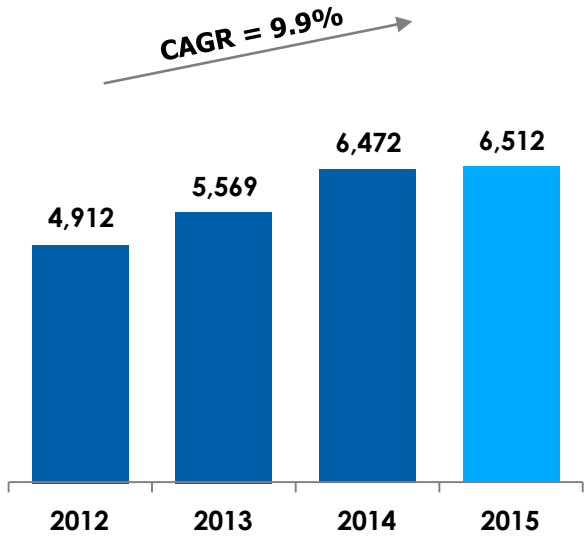
Financial Performance



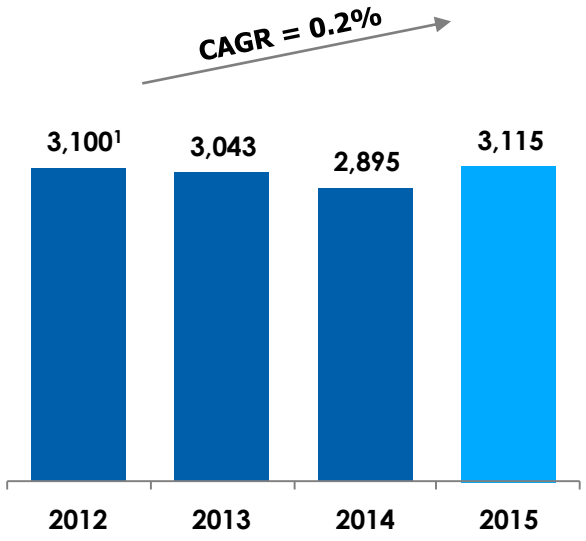
Solid financial performance

Efficiency in the management of the client portfolio and the focus on contracting strategies has enabled the Company to report stability in revenue generation, EBITDA and net income despite the turbulent times being experienced by the electricity sector and the Brazilian economy as a whole.

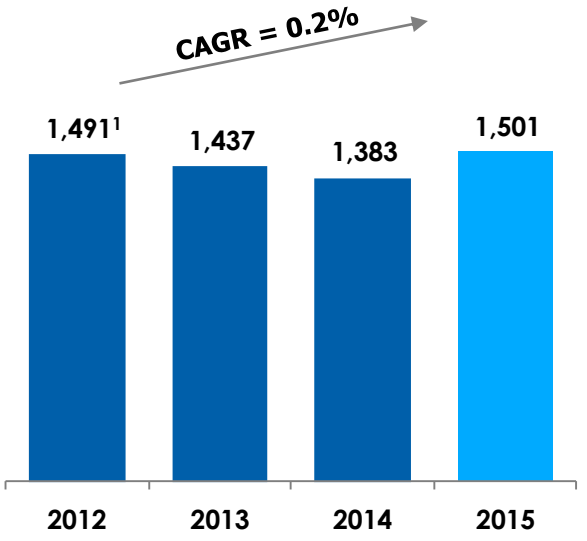
Net Revenue (R$ million)



EBITDA (R$ million)



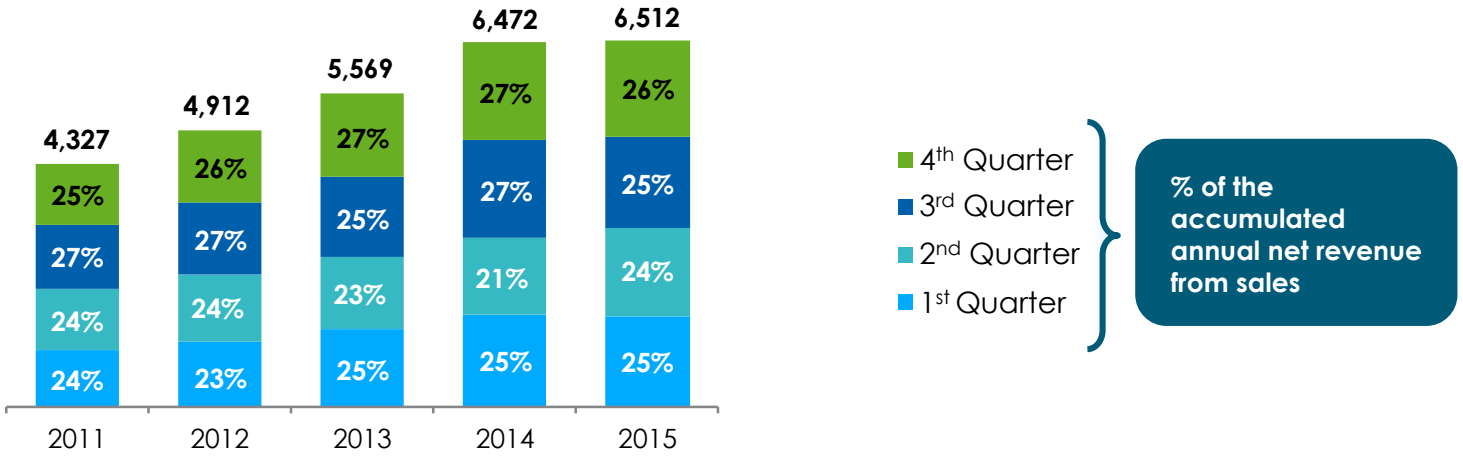
Net Income (R$ million)

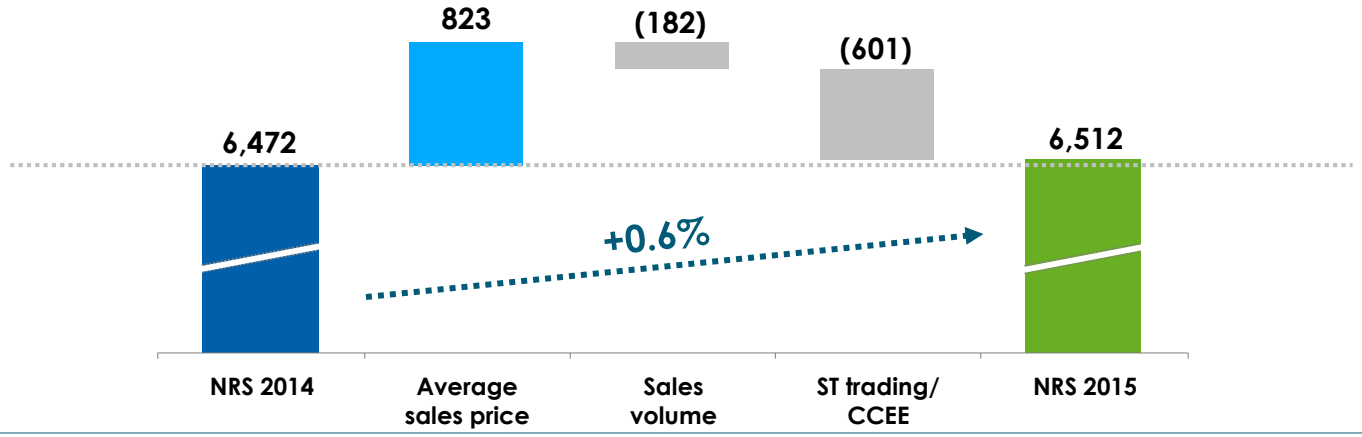


Note:
[1] Adjustment due to change in accounting practice.

Net revenue from sales change (R$ million)

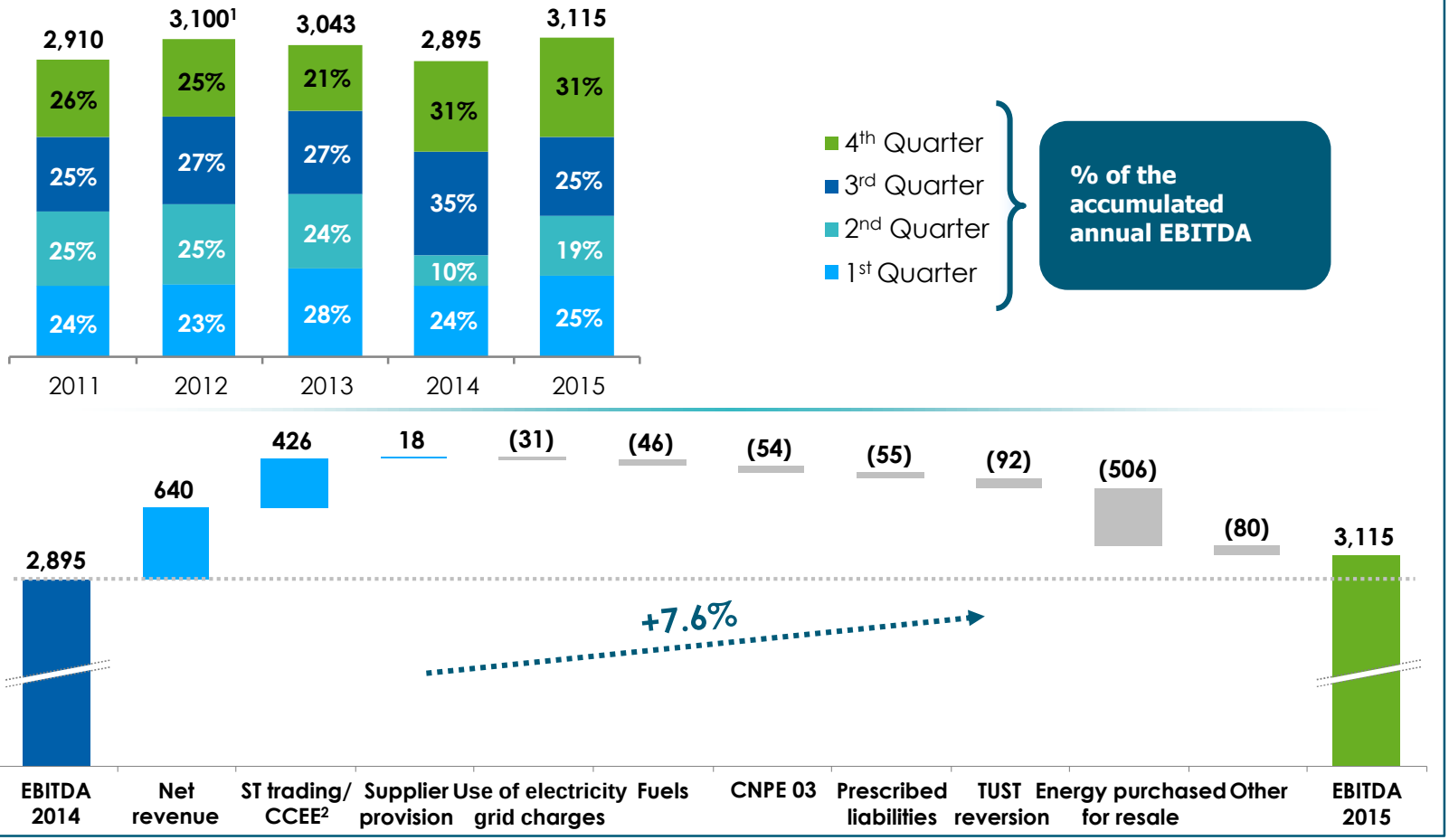
Net revenue from sales change (R$ million)





EBITDA change (R$ million)

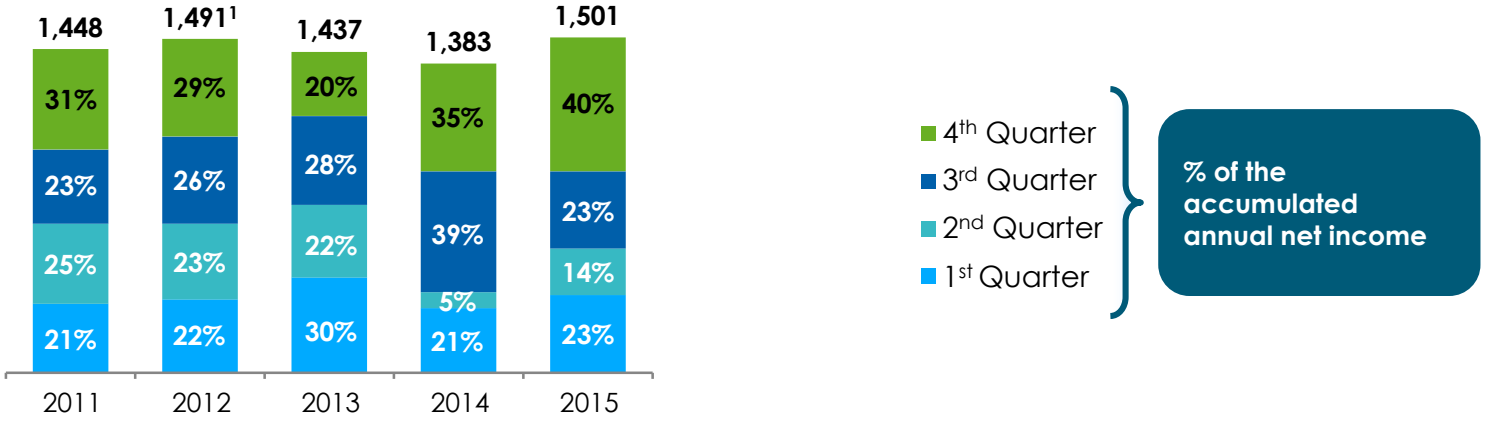
EBITDA change (R$ million)

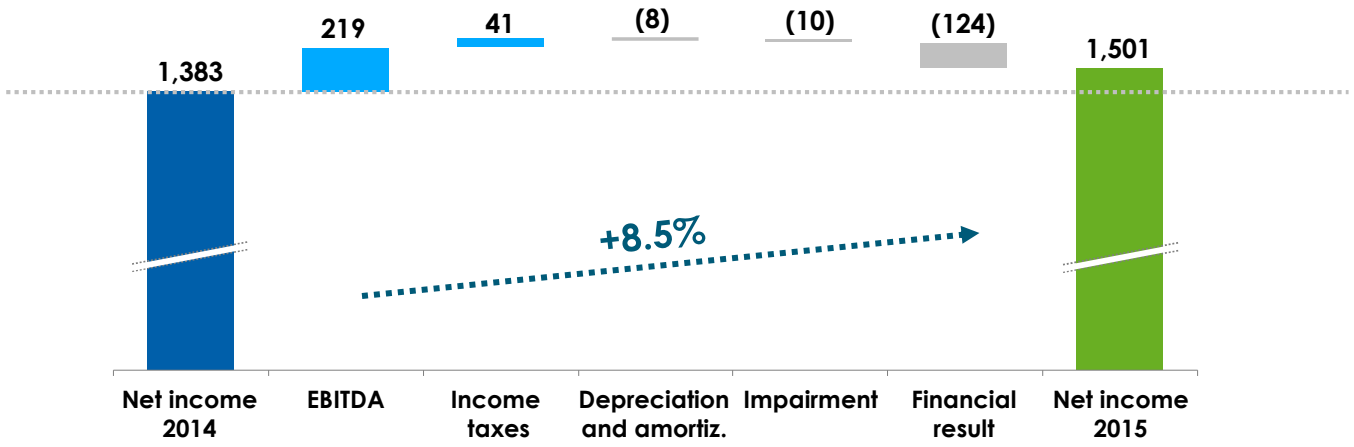


Notes:
[1] Adjustment due to change in accounting practice.
[2] Considers the combined effect of changes in revenue and expenses.

Net income change (R$ million)

Net income change (R$ million)



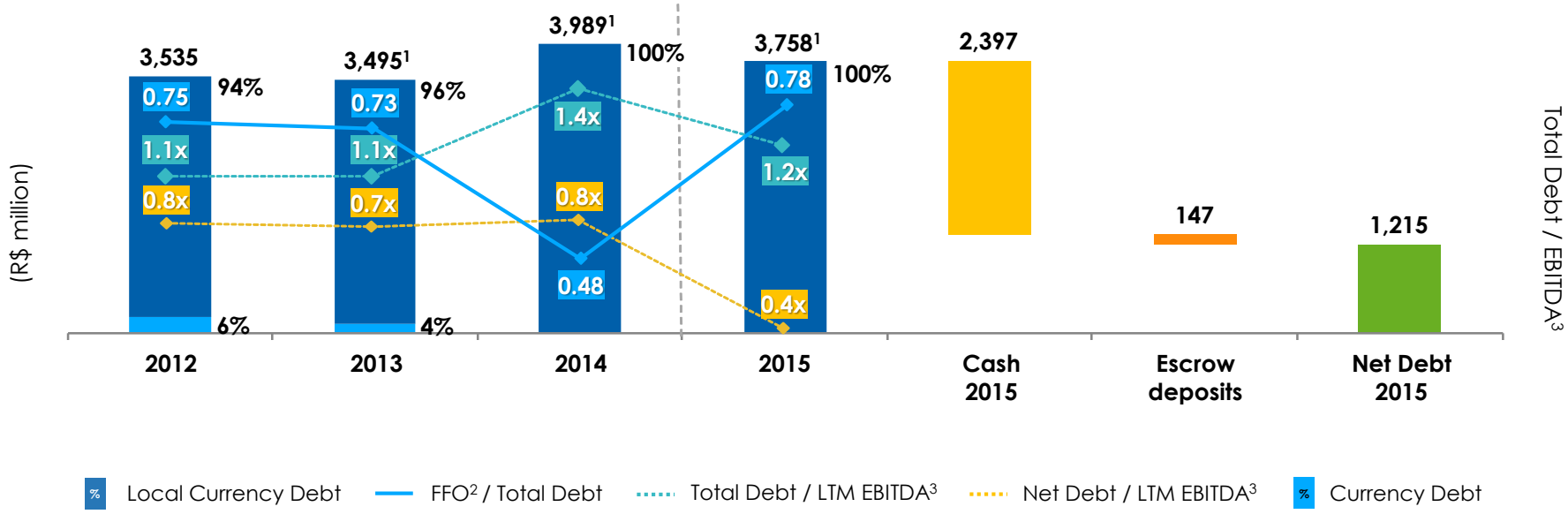


Note:
[1] Adjustment duo to change in accounting practice.

Limited debt with no currency exposure

The Company's low debt levels permit opportunities for growth to be explored. Uncertainty surrounding the GSF issue and the increase in interest rates resulted in Tractebel adopting an even more conservative posture during 2015.

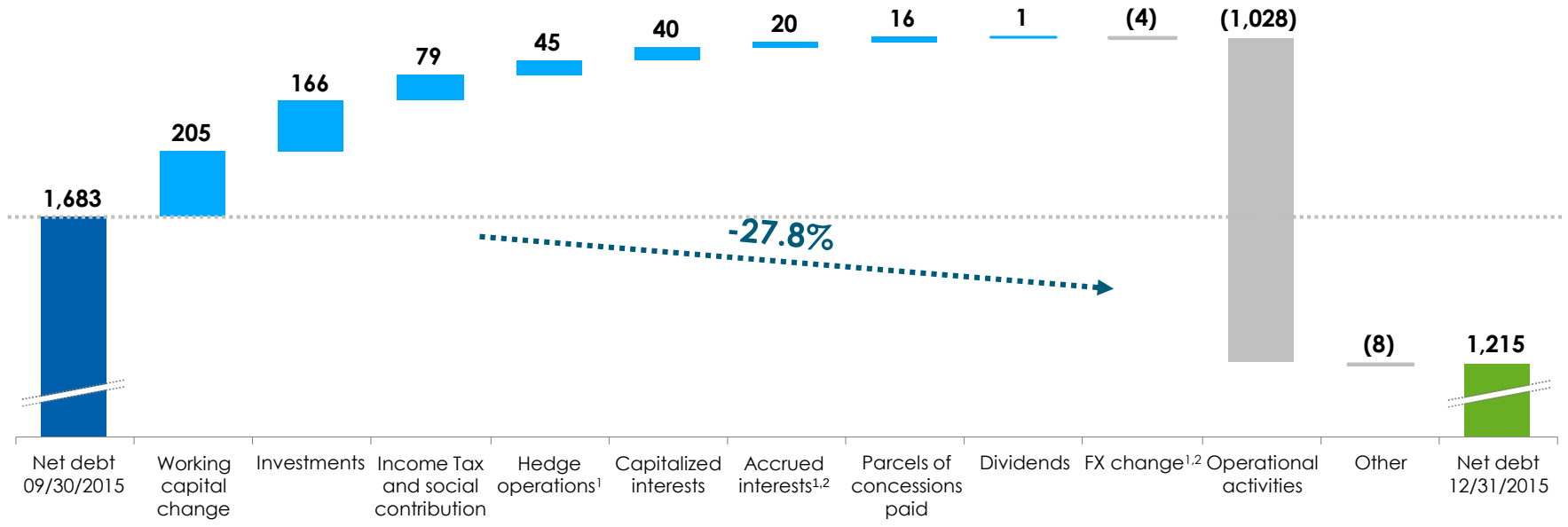
Debt Overview (R$ million)



Notes:
[1] Debt net of hedge operations.
[2] Funds from Operations.
[3] EBITDA in the past 12 months

Net debt change (R$ million)

Net debt change (R$ million)

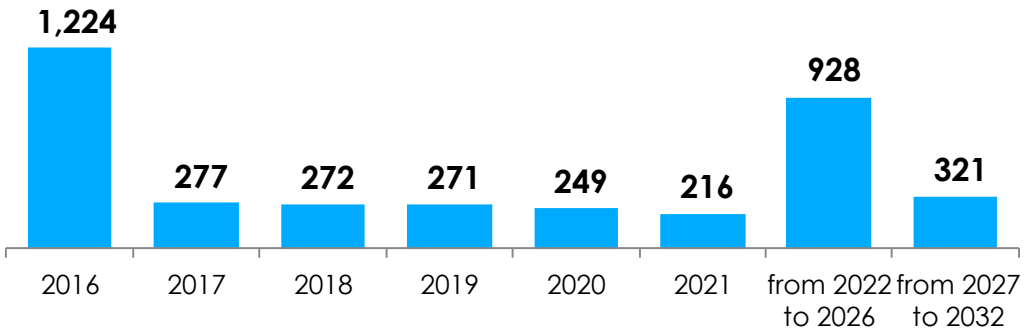


Notes:
[1] Does not impact the Company's cash position.
[2] The interests and FX change refer only to the Company's financial debt (loans, financing and debentures).

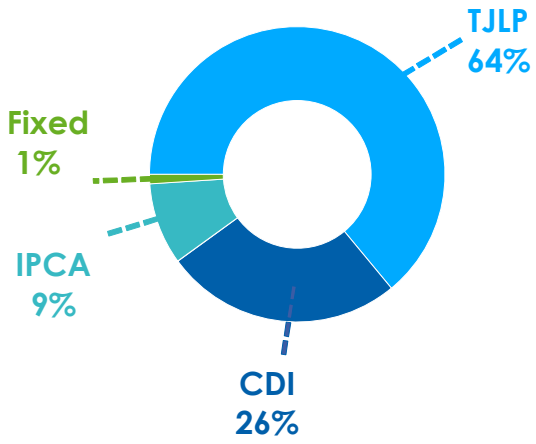
Medium and long-term debt, with low costs and defensive indexes

Debt profile and strong cash generation reduce refinancing risk.

Maturity debt schedule (R$ million)



Composition of debt

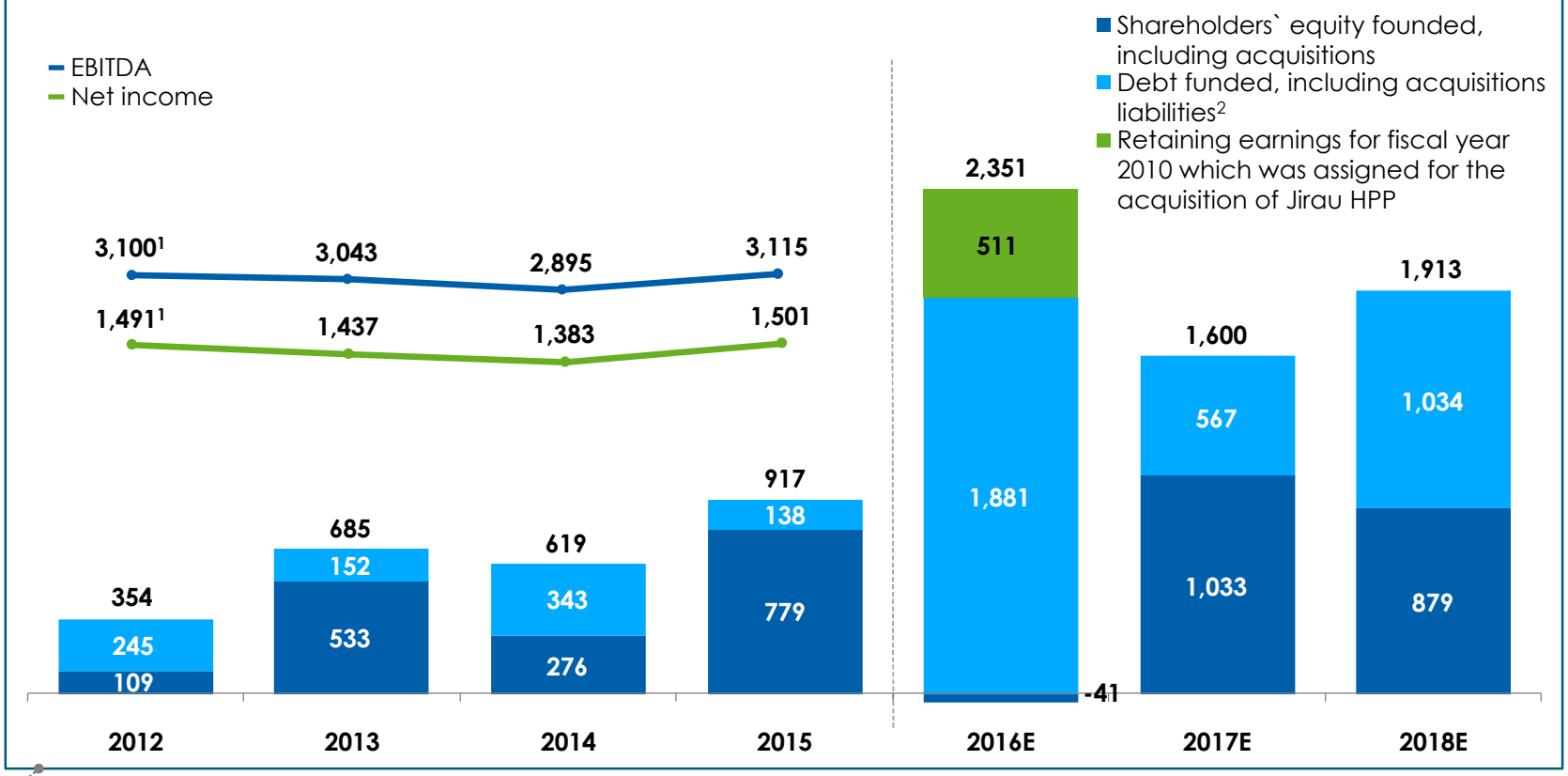


Nominal cost of debt: 11.1%

Remuneration of short-term debt is compatible with that of cash.

Expansion plan and maintenance CAPEX are supported by a strong cash flow generation and prudent funding strategy

Accomplished/expected CAPEX and corresponding financing sources (R$ million)

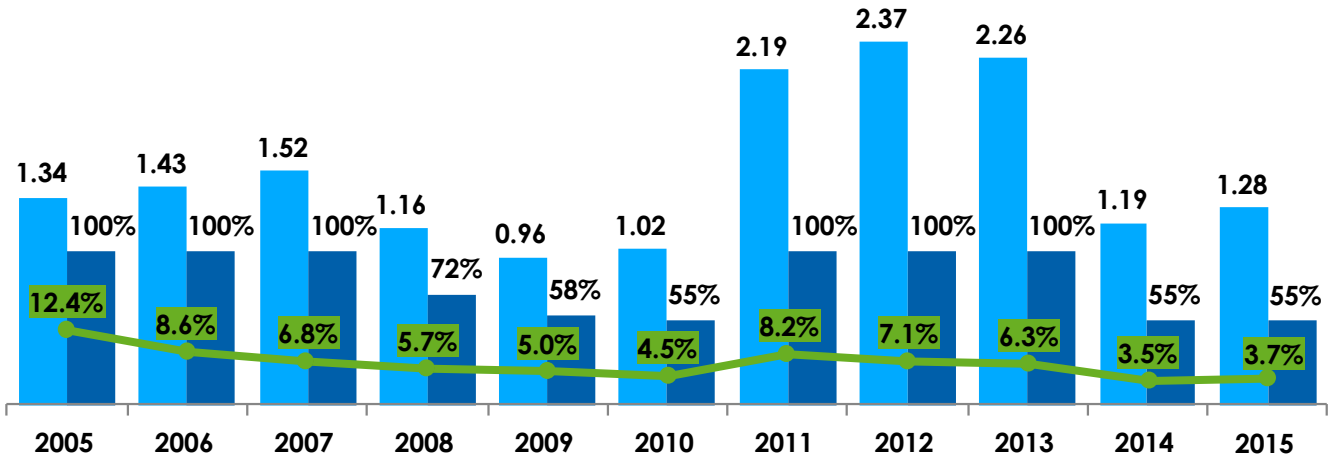


Notes:
1 Adjustment due to change in accounting practice.
2 Does not consider interests incurred during the construction.

Dividend policy

- By-law minimum payout: 30% of payable net income.
- Management commitment: minimum payout of 55% of payable net income.
- 3 dividends per year: semi-annual dividends and interest on shareholders' equity (annual).

Dividends (based on distributable net income)



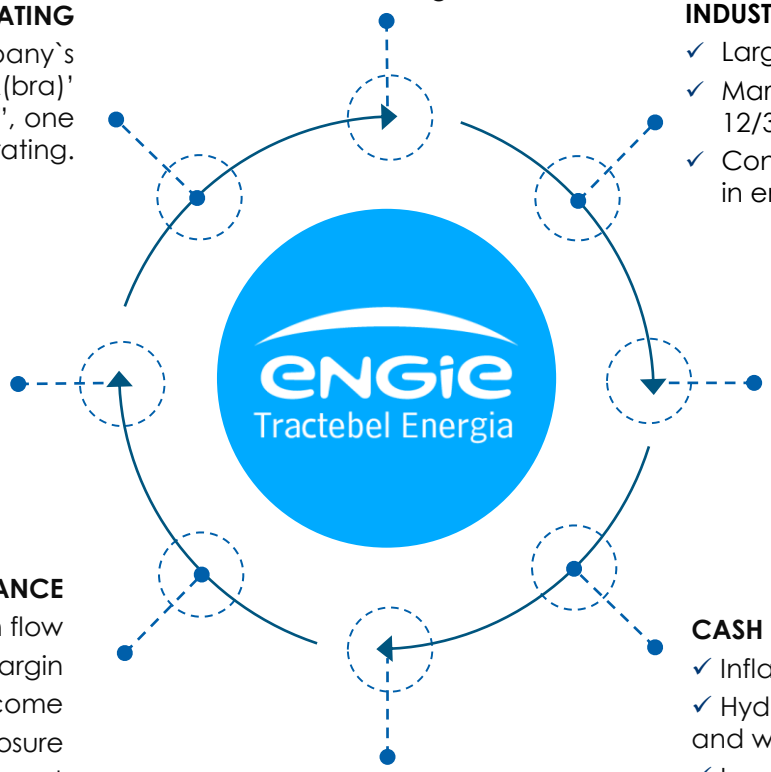
Notes:
[1] Considers the annual payable net income.
[2] Based on volume-weighted closing price of ON shares in the period.

Competitive advantages

STRATEGIC INDUSTRY
- ✓ Defensive profile in times of crisis
- ✓ Attractive funding conditions

PREMIUM RATING
- ✓ Fitch Ratings rated the Company`s Local Long Term Rating as 'AAA(bra)' and in global scale "BBB-(bra)", one higher level the sovereign rating.

INDUSTRY LEADERSHIP
- ✓ Largest private generator in Brazil
- ✓ Market cap: R$ 21.9 billion in 12/31/2015
- ✓ Controlled by ENGIE, world leader in energy



HIGH-CALIBER CORPORATE GOVERNANCE AND SUSTAINABILITY
- ✓ Experienced executives
- ✓ Discipline track record in investment decisions, based on triple bottom line concepts
- ✓ First class controlling shareholder

CLEAR COMMERCIAL STRATEGY
- ✓ Heavily contracted in the next years
- ✓ Diversified portfolio between free customers (over different industries) and regulated ones (distribution companies)
- ✓ Benefits from windows of opportunities

STABLE FINANCIAL PERFORMANCE
- ✓ Strong cash flow
- ✓ High average EBITDA margin
- ✓ Consistent net income
- ✓ No FX exposure
- ✓ Active financial management

CASH FLOW PREDICTABILITY
- ✓ Inflation-indexed contracts
- ✓ Hydro basis, completed by thermal and wind
- ✓ Long-term contracting strategy

HIGH OPERATIONAL PERFORMANCE
- ✓ Benchmark indexes of availability
- ✓ ISO 9001 (quality management), 14001 (environment management) and OHSAS 18001 (occupational health and safety) certified plants

Contacts

Tractebel Energia:

Eduardo Sattamini
Finance and Investor Relations Director
sattamini@tractebelenergia.com.br

Rafael J. Caron Bósio
Investor Relations Manager
rbosio@tractebelenergia.com.br
+55 48 3221 7221

www.tractebelenergia.com.br

ENGIE Energy Latin America (pre-transfer projects):

Anamélia Medeiros
Market Relations Manager
anamelia.medeiros@gdfsuezla.com
+55 21 3974 5400

06

Support Data



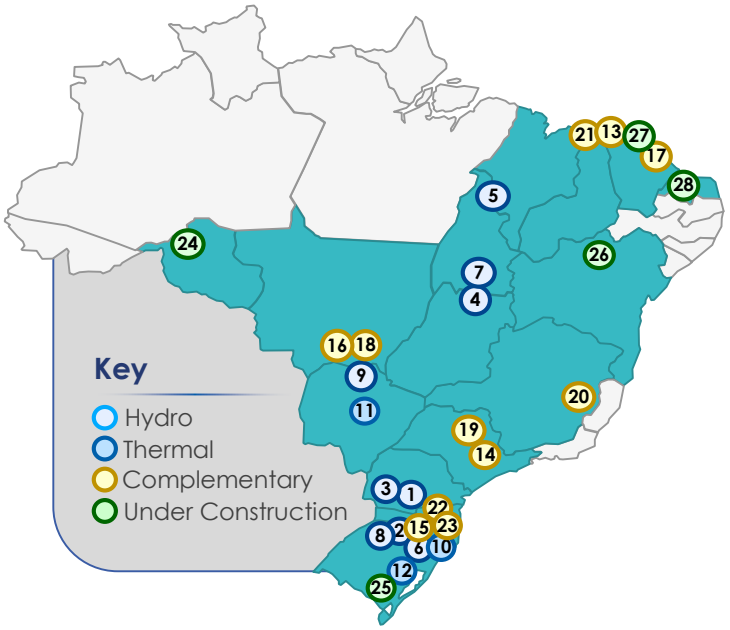
Diversified portfolio of assets, with strategic location

Installed capacity of 7,044.3 MW from 28 plants operated by Tractebel Energia: 79% hydro, 16% thermal and 5% complementary. This capacity stands for 89% increase since 1998.

	Hydro Power Plants	Installed Capacity (MW)	Commercial Capacity (MWa)[1]
1	Salto Santiago	1,420.0	735.2
2	Itá	1,126.9[2]	544.2[2]
3	Salto Osório	1,078.0	522.0
4	Cana Brava	450.0	273.5
5	Estreito	435.6[2]	256.9[2]
6	Machadinho	403.9[2]	147.2[2]
7	São Salvador	243.2	151.1
8	Passo Fundo	226.0	119.0
9	Ponte de Pedra	176.1	132.3
	Total	5,559.7	2,881.4

	Thermal Power Plants	Installed Capacity (MW)	Commercial Capacity (MWa)[1]
10	Jorge Lacerda Complex[3]	857.0	649.9
11	William Arjona	190.0	136.1
12	Charqueadas	72.0	45.7
	Total	1,119.0	831.7

	Complementary Power Plants	Installed Capacity (MW)	Commercial Capacity (MWa)[1]
13	Trairi Complex[4]	115.4	63.9
14	Ferrari (Biomass)	80.5	35.6
15	Lages (Biomass)	28.0	25.0
16	Rondonópolis (SHP)	26.6	10.1
17	Beberibe (Wind)	25.6	7.8
18	José G. da Rocha (SHP)	23.7	9.2
19	Ibitiúva (Biomass)	22.9[2]	13.9[2]
20	Areia Branca (SHP)	19.8	10.4
21	Pedra do Sal (Wind)	18.0	5.7
22	Cidade Azul (Solar)	3.0	n/a
23	Tubarão P&D (Wind)	2.1	n/a
	Total	365.6	181.6



	Power Plants Under Construction	Installed Capacity (MW)	Commercial Capacity (MWa)[1]
24	Jirau (Hydro)[5]	1,500.0	882.0
25	Pampa Sul (Thermal)	340.0	323.5
26	Campo Largo Complex (Wind)	326.7	157.8
27	Santa Mônica Complex (Wind)	97.2	48.7
28	Assú V (Solar)	36.7	9.2
	Total	2,300.6	1,421.2

Notes:
[1] Figures following specific legislation.
[2] Portion owned by Tractebel Energia.
[3] Complex comprised by 3 power plants.
[4] Considers Trairi, Guajiru, Fleixeiras I and Mundaú Wind Farms.
[5] The Parent Company's stake (40% of 3,750 MW) might be transferred to Tractebel.

Thermal side: exposure to spot prices

375
avg MW

Expected minimum dispatch due to an annual inflexibility (based on the purchase of some 230,000 tons of coal a month)

+

375
avg MW (maximum exposure)

Thermal substitution energy

purchase in spot market

=

750
avg MW

Estimated commercial capacity (on a yearly basis)

Notes:
[1] Tractebel Energia has been fully contracted → purchase of thermal substitution energy.
[2] On a monthly basis, inflexibility variations may occur.
[3] Figures related to the Energy Trading Board (CCEE) settlement point.

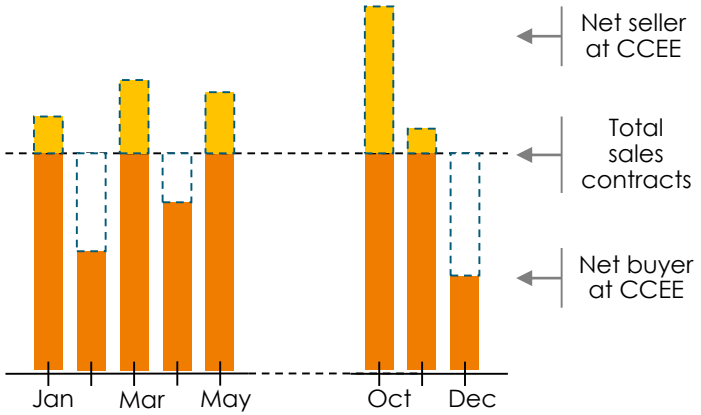
Power seasonalization

How does the allocation of resources at CCEE (the energy trading board) over the months interfere with a genco quarterly results?

- Gencos can allocate their resources over the following year's months;
- Monthly fluctuations on sales is also a driver for exposure to spot price;
- Monthly energy differences are settled at spot price, i.e., PLD (Price for Settlement of Differences);
- As penalties apply for gencos with short positions considering the past twelve months, a "monthly closing" market is available for those gencos;
- The pricing for the "monthly closing" market is strongly linked to the spot price..

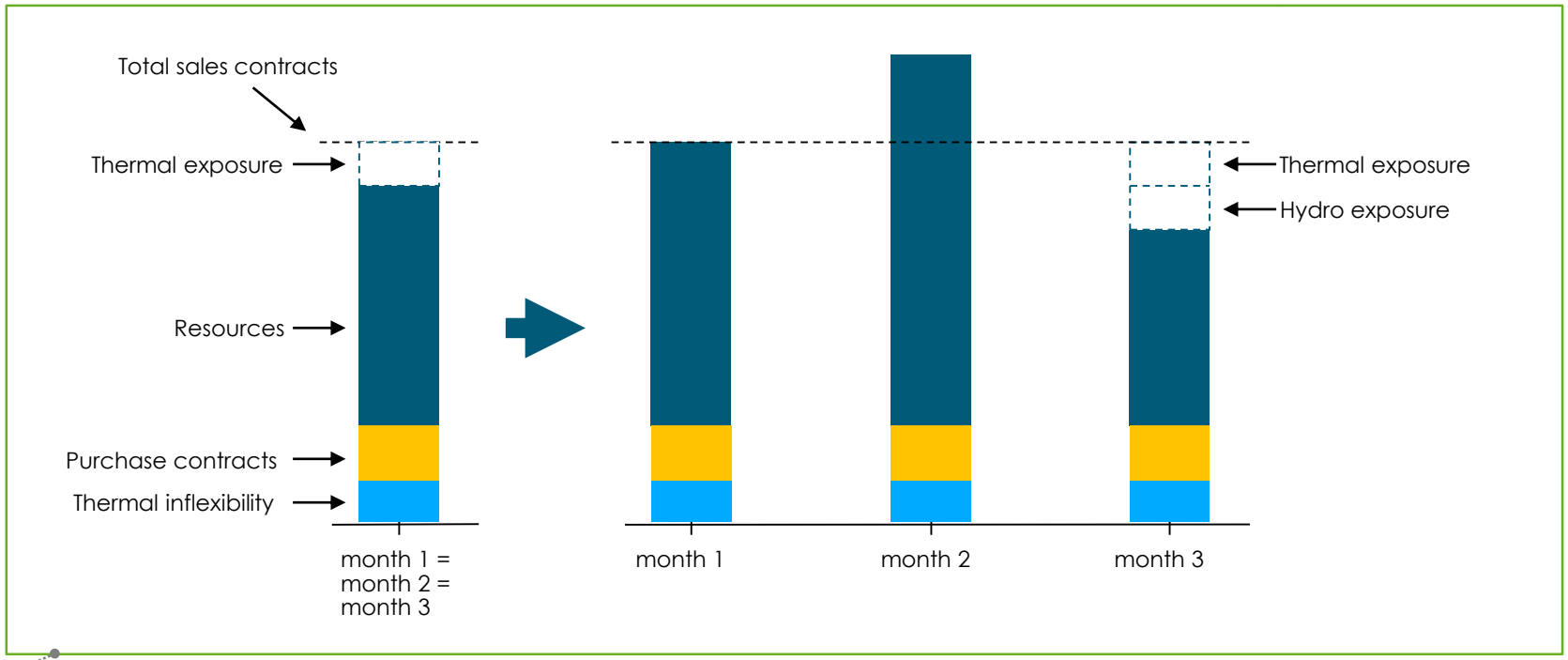
Annual resources

monthly allocation over year x1 (decision taken in Dec year x0)



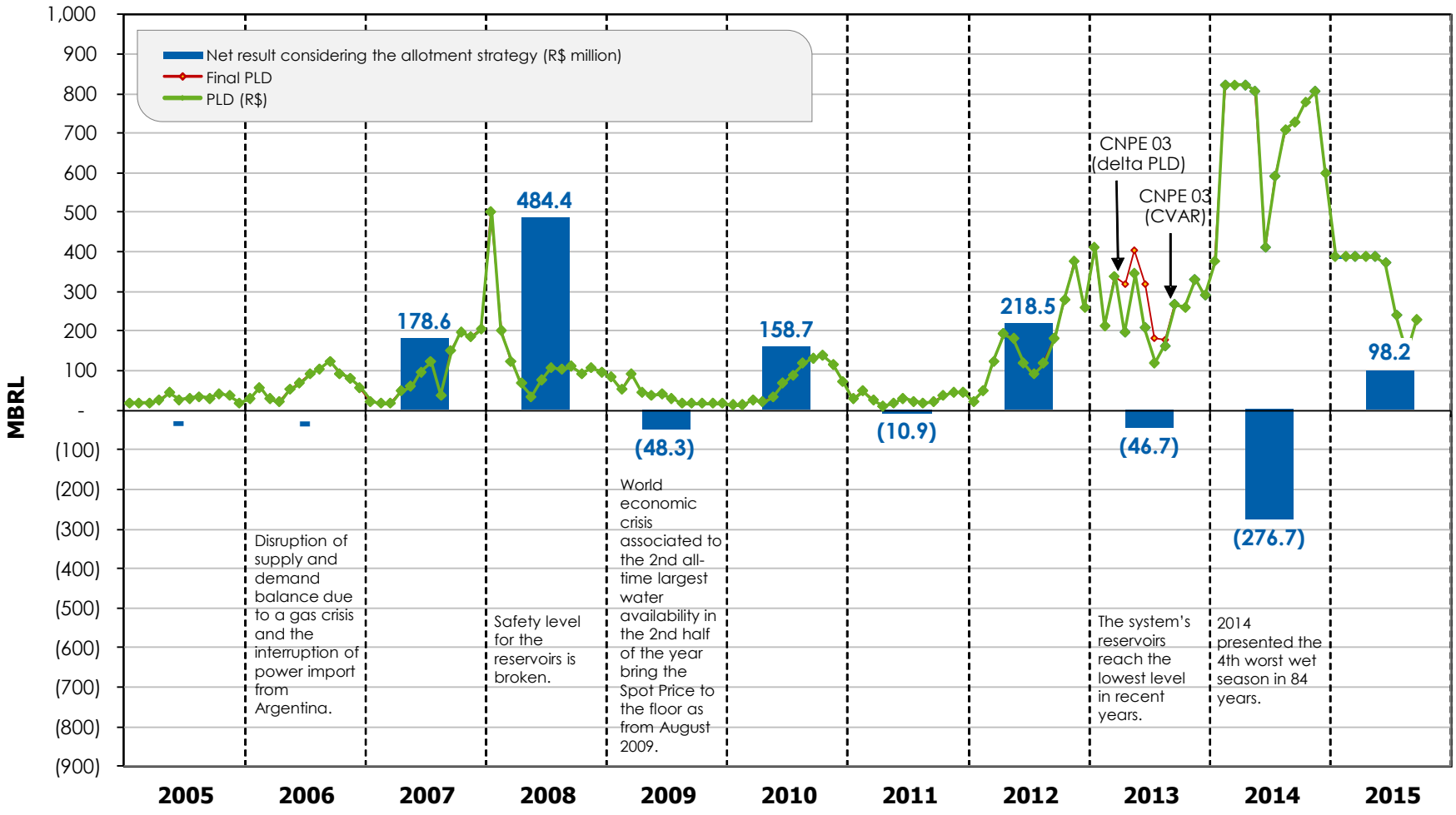
Mechanisms to mitigate exposure from the thermal side

As a consequence of the two previous slides, an appropriate monthly allocation of the resources over the year can mitigate the exposure arising from the thermal substitution energy to be purchased at spot price. An example follows:



Note: exposure box sizes are out of scale.

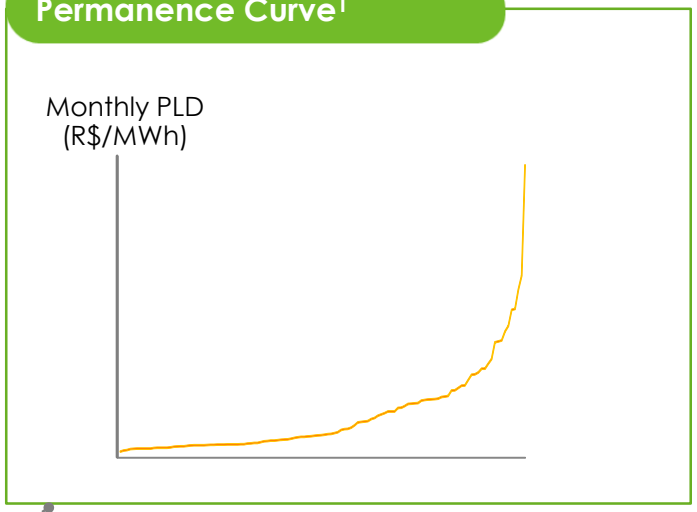
Expenses: impacts from energy allotment (2007 a 2015)



Main drivers and distribution curve of spot prices

- Reservoir levels of hydro plants;
- Rainfall behavior;
- Forecast of demand for power;
- Current and future availability of power plants and transmission lines;
- Availability of natural gas.

Permanence Curve[1]



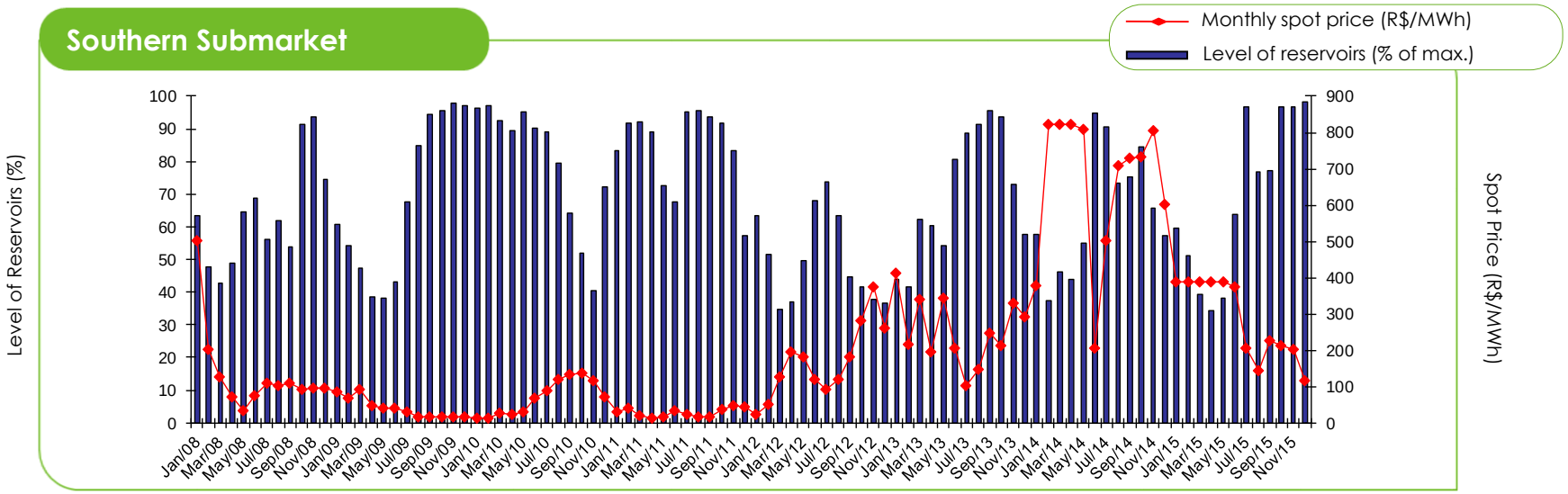
Occurrence[2]

	May/2003 - Sep/2012	Oct/2012 - Dec/15
Avg. PLD (in R$)	98.14	461.64
PLD Std Deviation (in R$)	102.29	254.93
Monthly PLD > R$ 100.00	35%	100%
Monthly PLD > R$ 200.00	11%	90%

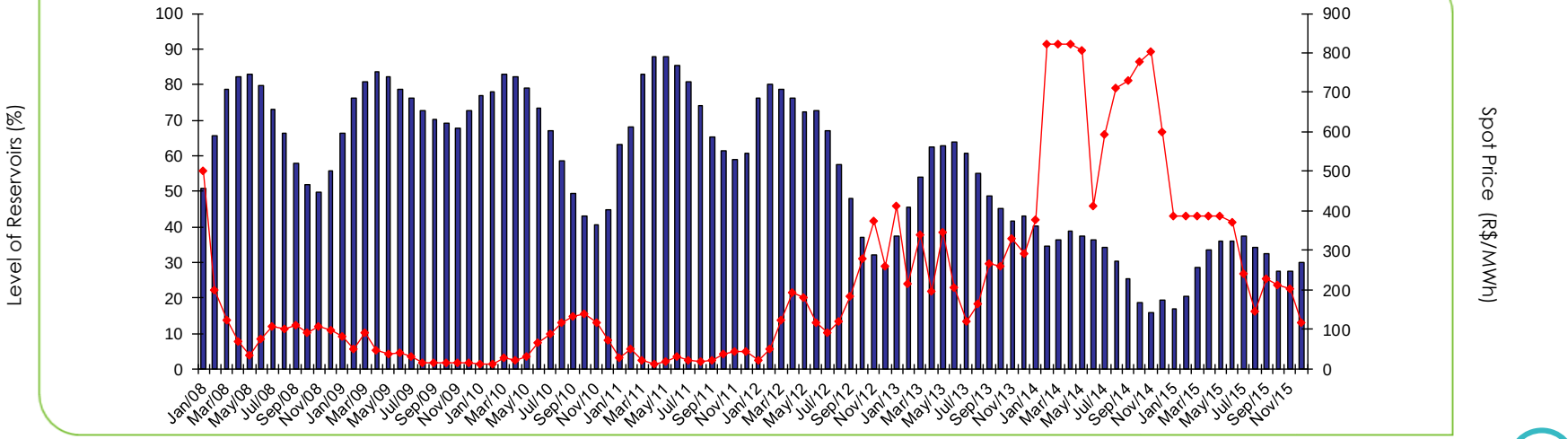
Notes:
[1] Figures have been ordered from the lowest. Values adjusted by IPCA (inflation index).
[2] PM 579 was published on September 11, 2012. Values adjusted by IPCA (inflation index).

Correlation between reservoir levels and spot prices

Southern Submarket

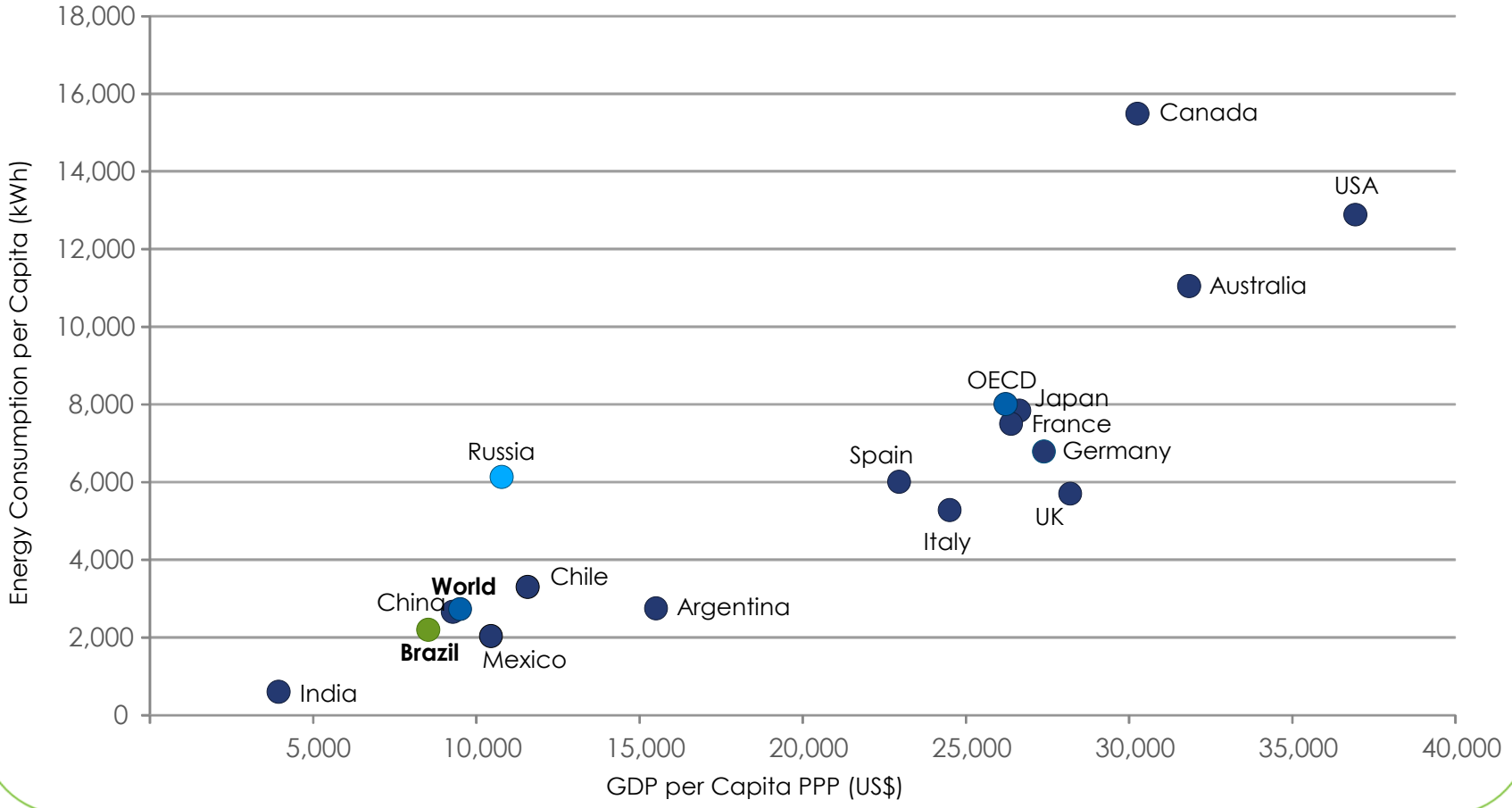


Southeast/Central-Western Submarket



Electricity: large growth potential

Electricity Consumption (per capita, yearly)



Source: MME, Aug/12 (consolidated information for 2009)

Tractebel Energia



Sustainable Development **Highlights**

Principles

Mission:
generating energy for life

Vision:
in a sustainable way, to be the best energy company in Brazil

Values:
professionalism, sense of partnership, teamwork, creation of value, respect for the environment, and ethics

Commitment with Sustainable Development:

- **Provide sustainable solutions from the economic, social and environmental points of view**
- **Control the impact of the Company's operations**
- **Create value for shareholders and society**

Commitment with society



- Continually upgrade the Management of the Environment together with Quality, Health and Safety, Social Responsibility and Energy Efficiency
- Contribute towards the mitigation of climate change
- Adopt fair competitive practices
- Combat fraud and corruption
- Contribute to social inclusion
- Not to countenance child or compulsory labor
- Not to accept discrimination
- Engage all stakeholders in the sustainable development concept, acting with ethics and transparency and sharing values, principles and practices

Our product



- **A product which is essential for life and present along the entire production chain**
- Proprietary installed capacity represents **5.4% of the total in Brazil. and 6.7% of the country's operating capacity**
- If scheduled stoppages are discounted, in 2015 **plant uptime** was **97.4%**
- The **Company generated 47,622.4 GWh**, equivalent to 5,436.3 average MW or 62.0% of operating capacity, being **86.5% from renewable sources:**
  - ✓ 83.4% from the hydroelectric plants
  - ✓ 3.1% from complementary sources (wind, SHPs, solar and biomass)
  - ✓ 13.5% from gas- and coal-fired thermal plants
- Job creation: about **1,200 direct employees** at the end of 2015, including Tractebel Energia and its subsidiaries

Public documents



- Corporate Bylaws
- Charters: Board of Directors and Sustainability Committee
- Tractebel Energia Policy for Sustainability Management:
  - ✓ Quality
  - ✓ Environment
  - ✓ Occupational Health and Safety
  - ✓ Social Responsibility
  - ✓ Energy Management
- Tractebel Energia Policy for Climate Change
- Tractebel Energia Policy for Stakeholder Engagement
- Human Rights Policy
- Environment Code
- Ethics Code

IV Ethics, Sustainability and Energy Seminar



- Held since 2012
- All stakeholders are invited: employees, clients, suppliers, shareholders, investors, government and community representatives
- Issues covered: human rights, diversity, ethics in professional relations and in society, climate change, preservation of headwaters, among others
- The fourth annual seminar was held at the head office and the Rio Uruguai regional office in Laranjeiras dos Sul, PR with video transmission to the other regional offices

Research and development



- Compulsory legal minimum investment of 1% of net annual operating revenue
- Objectives:
  - To seek sustainable solutions in order to add value to the operations
  - To interact with academic and research institutions for each region, incentivizing institutional and social development
- A total of R$ 37.4 million was allocated in 2015, 40% for projects, 40% for the National Scientific and Technological Development Fund (FNDCT) and 20% for funding the Empresa de Pesquisa Energética (EPE)
- In 2015, the 1st 2.1 MW wind turbine went into operation, part of the domestically manufactured 3.3 MW wind turbine development and certification project. The 2.1 MW turbine will serve as a pilot operation for testing the final 3.3 MW prototype and is installed adjacent to the Cidade Azul Solar Plant, which received the Fritz Müller Award from the State of Santa Catarina Environmental Protection Agency (Fatma)

ISE, certification and Sustainability Report

- BM&FBovespa's new ISE portfolio, announced November 26, 2015, is valid from January 4 through December 29, 2016
- It comprises the equities of 35 companies (in 2015, there were 40)
- Tractebel Energia is one of ten that has remained a component of the ISE since its inception in 2005

- Of the 8,765 MW of installed capacity operated by the Company, 83.6%, installed in 14 of the 28 plants, are certified according to NBR ISO 9001 and 14001 (Quality and Environment) and NBR OHSAS 18001 (Occupational Health and Safety) norms
- The Jorge Lacerda Thermoelectric Complex is also certified according to the Energy Efficiency NBR ISO 50001 norm

---

- Tractebel Energia's Sustainability Report is published annually according to the GRI G4 standard and from 2014 adopted Integrated Report guidelines
- The report for 2014, published in April 2015, received an honorable mention and was place second in the 17th Abrasca Award – Annual Report ahead of all the other sector companies

Sustainability indicators

Item	Dimension[2]	Indicator[3]	Indicator GRI[4]	4Q15	4Q14	Change	12M15	12M14	Change
		Sustainability Indicators[1]							
1	Quality	Number of plants in operation	EU1. G4-9	28	27	1	28	27	1
2		Total operating installed capacity (MW)	EU1. G4-9	8,765	8,748	0.2%	8,765	8,748	0.2%
3		Number of certified plants	EU6. G4-15	14	14	-	14	14	-
4		Certified installed capacity (MW)	EU6. G4-15	7,330	7,330	-	7,330	7,330	-
5		Certified installed capacity in relation to total	EU6. G4-15	83.63%	83.79%	-0.2 p.p.	83.63%	83.79%	-0.2 p.p.
6		Installed capacity from renewable sources	EU1. G4-9	7,646	7,629	0.2%	7,646	7,629	0.2%
7		Installed capacity from renewable sources in relation to total	EU1. G4-9	87.23%	87.21%	0.02 p.p.	87.23%	87.21%	0.02 p.p.
8		Total energy generation (GWh)	EU2	13,031	13,108	-0.6%	47,622	48,942	-2.7%
9		Certified energy generation	EU6. G4-15	11,829	11,521	2.7%	41,894	42,315	-1.0%
10		Certified generation in relation to total	EU6. G4-15	90.8%	87.9%	2.9 p.p.	88.0%	86.5%	1.5 p.p.
11		Generation of energy from renewable sources (GWh)	EU2	11,591	11,459	1.2%	41,212	42,344	-2.7%
12		Generation from renewable sources in relation to total	EU2	88.9%	87.4%	1.5 p.p.	86.5%	86.5%	-
13		Generator complex uptime, discounting scheduled stoppages	EU30	97.9%	96.3%	1.6 p.p.	97.4%	96.5%	0.9 p.p.
14		Generator complex uptime, considering scheduled stoppages	EU30	86.7%	86.6%	0.1 p.p.	86.9%	86.8%	0.1 p.p.
15	Environment	Total number of seedlings planted and donated[5]	G4-EN27	81,178	78,693	3.2%	262,218	301,435	-13.0%
16		Number of plant visitors[5]	G4-26	24,287	23,831	1.9%	100,464	91,490	9.8%
17		CO2 emissions (fossil fuel-fired plants) (t/MWh)	G4-EN15	0.969	0.967	0.2%	0.976	0.970	0.6%
18		CO2 emissions of Tractebel Energia generator complex (t/MWh)	G4-EN15	0.107	0.122	-12.3%	0.131	0.131	-
19	Occupational Health and Safety (SST)	Average number of employees[6]	G4-10. G4-LA1	1,138	1,138	-	1,139	1,132	0.6%
20		Frequency Rate (TF),not including outsourced personnel[7]	G4-LA6	0.000	0.000	-	0.000	1.450	↓
21		Severity Rate (TG), not including outsourced personnel[8]	G4-LA6	0.000	0.000	-	0.000	0.062	↓
22		Frequency Rate (TF), including outsourced personnel[7]	G4-LA6	0.000	2.650	↓	0.540	2.870	↓
23		Severity Rate (TG), including outsource personnel[8]	G4-LA6	0.000	0.000	-	0.000	0.023	↓
24	Social Responsibility[9]	Investments with no tax break	G4-EC8. G4-SO1	892.97	1,613.56	-44.7%	3,408.23	4,534.95	-24.8%
25		Investments under the Infant and Adolescent Fund	G4-EC8. G4-SO1	526.62	322.87	63.1%	1,557.34	1,887.43	-17.5%
26		Investments under the Culture Incentive Law	G4-EC8. G4-SO1	2,083.70	323.59	543.9%	7,478.44	7,687.73	-2.7%
27		Investments under the Sports Law	G4-ECB G4-SO1	970.00	1,252.04	-22.5%	1,320.00	1,319.04	0.1%
28		Other incentivized investments (health and others)	G4-EC8. G4-SO1	943.51	1,020.60	-7.6%	1,329.81	1,220.60	8.9%

Notes:1) More indicators can be found in the ITR (website of the Company / Investors / Financial Information / Financial Statements).
2) Reference: Tractebel Energia Sustainable Management Policy.
3) Indicators do not include Alegrete TPP (since 2013, pending return to the Federal Government), with the exception of OHS, since there are activities still being conducted at the plant both by direct employees and outsourced personnel.
4) GRI: Global Reporting Initiative.
5) Not including Consórcio Estreito Energia (Ceste).
6) Average for the period of the number of direct employees that work at the plants in operation, at the head office and the offices in São Paulo.
7) TF = number of accidents at work occurring for every million hours of exposure to risk considering the same employees for item 19.
8) TG = number of days lost due to accidents at work occurring for every thousand hours of exposure to risk, taking into account the same employees as in item 19 and outsourced personnel that work at the same locations.
9) Amounts in thousands of Reais.

Socio-environmental and fiscal responsibility - 2015

Investments	R$ thousands
Socioenvironmental in the installation of wind projects, Ferrari TPP and Pampa Sul:	
• Compulsory (environmental compensation or environmental commitments)	1,290.23
• Voluntary, without tax breaks	9.50
• BNDES social sub credit	17.96
Environmental programs at plants in operation:	
• CAPEX	35,057.26
• OPEX	33,570.47
Research and Development	37,406. 43
Corporate Social Responsibility Programs:	
• Voluntary, with tax breaks	11,685.59
• Voluntary without tax breaks	3,428.23
Consolidated Federal, State and Municipal taxes	1,263,529.00
Financial Compensation for Use of Water Resources	177,958.00

Company recognition in 2015

- Institutional Investor Magazine Ranking – Electric & Other Utilities – best company, best investor relations program and professional (buy side and sell side), best CFO (sell side) and best CEO (buy side)
- Brasil Ambiental Award (Amcham Rio) – Socio-environmental Responsibility Category - Jorge Lacerda Thermoelectric Complex Environmental Education Program
- Fritz Muller Award from the Santa Catarina State Environmental Protection Agency (Fatma)
- Degraded Areas Recovery Category - Tractebel Environmental Park
- Production/Energy Inputs Conservation Category – Research and Development in solar photovoltaic energy project
- Research Institute Category – Sustainable Development Reference Center - Machadinho Consortium
- Von Martius Sustainability Award – Nature Category – 3rd place – Headwaters Protection Program
- Anefac Transparency Trophy 2015 – Net Revenues up to R$ 5 billion category
- Outstanding company in the Ethics in Business Institute Initiative – Most Ethical Companies in Brazil 2015