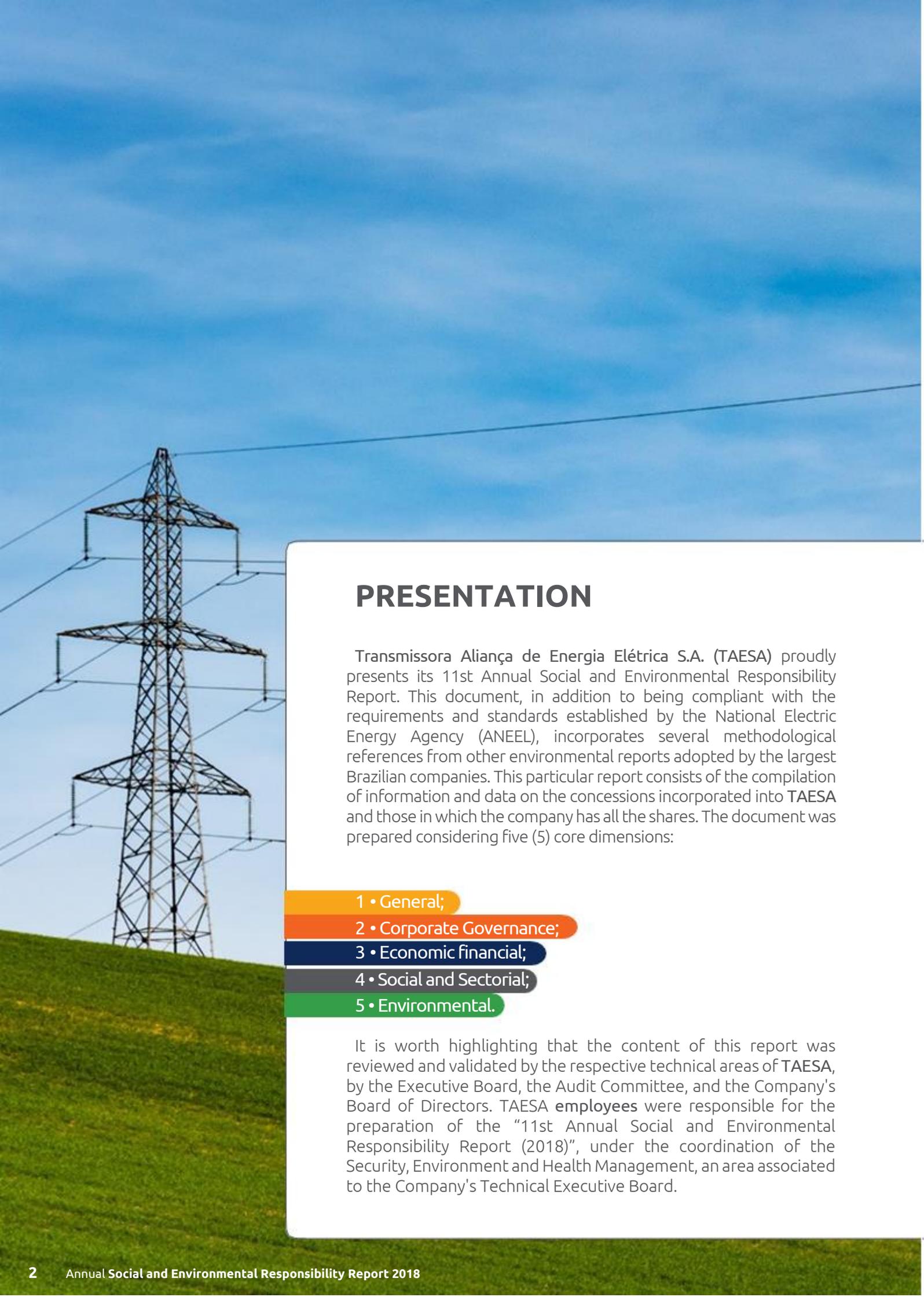




Annual  
**SOCIAL AND  
ENVIRONMENTAL**  
Responsibility Report  
**2018**

taesa 



## PRESENTATION

Transmissora Aliança de Energia Elétrica S.A. (TAESA) proudly presents its 11st Annual Social and Environmental Responsibility Report. This document, in addition to being compliant with the requirements and standards established by the National Electric Energy Agency (ANEEL), incorporates several methodological references from other environmental reports adopted by the largest Brazilian companies. This particular report consists of the compilation of information and data on the concessions incorporated into TAESA and those in which the company has all the shares. The document was prepared considering five (5) core dimensions:

- 1 • General;
- 2 • Corporate Governance;
- 3 • Economic financial;
- 4 • Social and Sectorial;
- 5 • Environmental.

It is worth highlighting that the content of this report was reviewed and validated by the respective technical areas of TAESA, by the Executive Board, the Audit Committee, and the Company's Board of Directors. TAESA employees were responsible for the preparation of the "11st Annual Social and Environmental Responsibility Report (2018)", under the coordination of the Security, Environment and Health Management, an area associated to the Company's Technical Executive Board.

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## OVERVIEW

### MESSAGE FROM MANAGEMENT

The Company achieved Net Income of R\$ 1.07 billion and maintained a robust return, paying R\$ 960.2 million to its shareholders, including R\$ 684.4 million in dividends and R\$ 275.8 million in interest on own capital. The availability index of its transmission lines was 99.94%, which shows a high level of commitment and competence to its customers.

TAESA's results were possible due to employees' engagement, competence of Executive Board and supported by a standard of corporate governance, composed of a solid shareholders' base.

The controlling shareholders' base of the Company, composed of CEMIG and ISA as operator partners with recognized quality in the management of assets of the electric sector, contributed on a significant manner to the gains obtained through actions in the decision-making forums of the Top Management (Board of Directors, Audit Committee and specific Committees). This combination of competences enhanced the Company's competitiveness.

Regarding the Sustainability Pillars (Social, Economic and Environmental), the Company searched to optimize, in the best way, the investment of funds so as to fulfill with excellence its social obligations, processes and projects, considering its growth strategy and preserving natural resources.

The management of **TAESA** would like to thank their Shareholders for the fundamental support and trust for the realization of all the actions and projects that generated the results achieved. We would also like to thank all of our Employees, who on a professional and committed manner built the gains obtained, to all Suppliers, Partners and other Related Parties for their fundamental contribution in sundry actions realized.

We are pleased to present the detailed and consolidated results for 2018.

#### EXECUTIVE BOARD

## COMPANY

TRANSMISSORA ALIANÇA DE ENERGIA ELÉTRICA S.A. (TAESA) currently leads one of the largest electric power transmission groups in Brazil. Together, the companies comprising TAESA Group have approximately 12.7 thousand kilometers of transmission lines, members of the Basic Network.

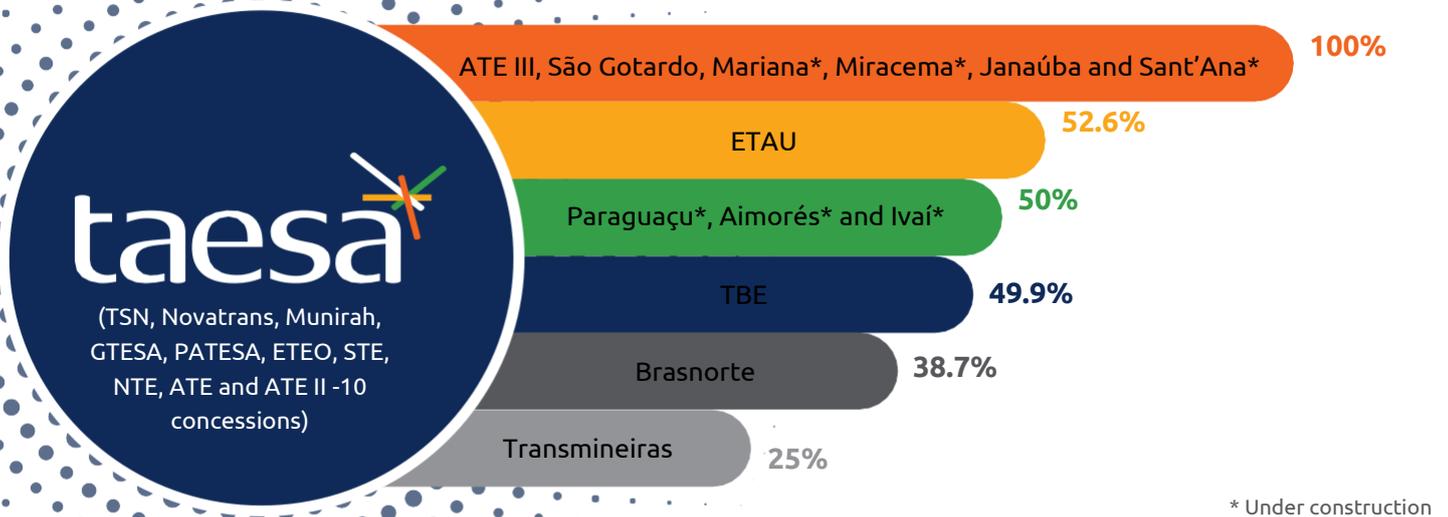
The Company stands out for its high level of technical knowledge and high management and operational standards, to guarantee a satisfactory return for its shareholders and a motivating work environment for its employees.

The 36 transmission concessions/interest held by TAESA are segregated into:

- 10 concessions making up the holding company (TSN, NVT, ETEO, GTESA, PATESA, Munirah, NTE, STE, ATE and ATE II);
- 6 full investees (ATE III, São Gotardo, Mariana, Janaúba, Miracema and Sant’ana); and
- 20 shareholdings (ETAU, Brasnorte, Aimorés, Paraguaçu, Ivaí, Transmineiras, TBE).

The figure below represents the structure of concessions/shareholdings of TAESA Group:

### CONCESSIONS AND SHAREHOLDINGS OF THE TAESA GROUP:



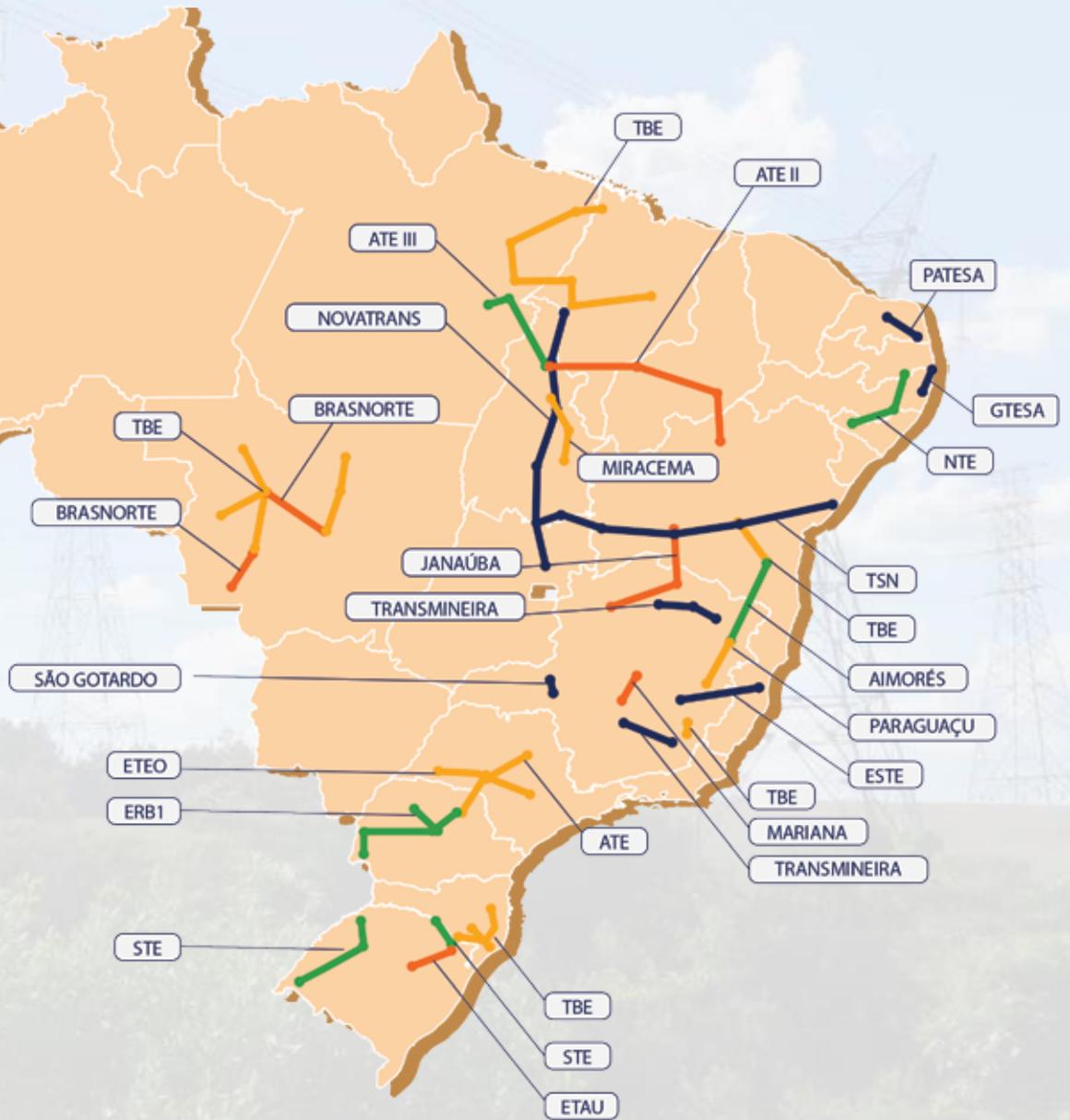
Regarding the companies in which TAESA holds equity interests, find below a simplified table detailing its ownership percentage – base year: 2018.

SPE	SHAREHOLDERS	Ownership Percentage (%)
BRASNORTE	Transmissora Aliança de Energia Elétrica S.A.	38.6645
	Eletrobrás Eletronorte	49.7115
	Bimetal Energia LTDA.	11.6240
	<b>TOTAL</b>	<b>100</b>
ETAU	Transmissora Aliança de Energia Elétrica S.A.	52.5838
	Eletrobrás Eletrosul	27.4162
	DME Energética S.A.	10.0000
	CEEE - GT	10.0000
	<b>TOTAL</b>	<b>100</b>
ECt E	Alupar Investimento S.A.	50.0222
	Centrais Elétricas de Santa Catarina - CELESC	30.8850
	Transmissora Aliança de Energia Elétrica S.A.	19.0928
	<b>TOTAL</b>	<b>100</b>
Et Ep	Alupar Investimento S.A.	50.0155
	Transmissora Aliança de Energia Elétrica S.A.	49.9845
	<b>TOTAL</b>	<b>100</b>
ENTE	Alupar Investimento S.A.	50.0111
	Transmissora Aliança de Energia Elétrica S.A.	49.9889
	<b>TOTAL</b>	<b>100</b>
EATE	Alupar Investimento S.A.	50.0176
	Transmissora Aliança de Energia Elétrica S.A.	49.9824
	<b>TOTAL</b>	<b>100</b>
ERTE	Alupar Investimento S.A.	21.9595
	Transmissora Aliança de Energia Elétrica S.A.	21.9476
	Empresa Amazonense de Transmissão de Energia S.A.	18.0766
	Empresa Norte de Transmissão de Energia S.A.	38.0162
	<b>TOTAL</b>	<b>100</b>
EBTE	Empresa Amazonense de Transmissão de Energia S.A.	51.0000
	Transmissora Aliança de Energia Elétrica S.A.	49.0000
	<b>TOTAL</b>	<b>100</b>
Aimorés	CTEEP – Companhia de Transmissão de Energia Elétrica Paulista	50.0000
	Transmissora Aliança de Energia Elétrica S.A.	50.0000
	<b>TOTAL</b>	<b>100</b>
paraguaçu	CTEEP – Companhia de Transmissão de Energia Elétrica Paulista	50.0000
	Transmissora Aliança de Energia Elétrica S.A.	50.0000
	<b>TOTAL</b>	<b>100</b>
ivaí	CTEEP – Companhia de Transmissão de Energia Elétrica Paulista	50.0000
	Transmissora Aliança de Energia Elétrica S.A.	50.0000
	<b>TOTAL</b>	<b>100</b>

For a better view of the concessions that comprise the TAESA Group, find below a table with the main details of such Concession Contracts:

DETAILED CHART OF THE TAESA GROUP'S CONCESSION CONTRACTS			
Concession	Concession Contract	Venture	End of Concession
BRASNORTE	003/2008	LT Jauru - Juba CD 230 kV SE Juba 230/138Kv LT Brasnorte - Nova Mutum CD 230 kV SE Brasnorte 230/138Kv	3/17/2038
NOVATRANS	095/2000	Interligação Norte - Sul II	12/20/2030
MUNIRAH	006/2004	LT Camaçari II - Sapeaçu	2/18/2034
TSN	097/2000	Interligação Sudeste - Nordeste	12/20/2030
ETEO	040/2000	LT Taquaruçu - Assis - Sumaré	5/12/2030
ETAU	082/2002	LT Campos Novos - Lagoa Vermelha - Santa Marta	12/18/2032
GTESA	001/2002	LT Goianinha - Mussurú II C3	01/21/2032
PATESA	087/2002	LT Paraíso - Açú	12/11/2032
NTE	002/2002	TL Xingó – Angelim II 500Kv LT Angelim - Campina Grande II 230Kv	01/21/2032
STE	081/2002	LT Uruguaiana - Santa Rosa	07/01/2032
ATE	003/2004	LT Londrina - Araraquara	07/30/2033
ATE II	011/2005	LT Colinas - Sobradinho 500 kV	03/15/2035
ATE III	001/2006	LT Marabá – Colinas 500 Kv LT Itacaiúnas – Carajás 230 kV	04/27/2036
SÃO GOTARDO	024/2012	SE São Gotardo	08/27/2042
EATE	042/2001	LT Tucuruí - Presidente Dutra	06/12/2031
EBTE	011/2008	LTs Juína – Brasnorte; Juba - Brasnorte Parecis - Brasnorte; N. Mutum – Sorriso – Sinop	10/16/2038
ECTE	088/2000	LT Campos Novos - Blumenau	11/01/2030
ENTE	085/2002	LT Tucuruí - Açailândia	12/11/2032
ERTE	083/2002	LT Vila do Conde - Castanhal - Santa Maria	12/11/2032
ESDE	025/2009	SE - Santos Dumont	11/19/2039
ETEP	043/2001	LT Vila do Conde - Tucuruí	06/12/2031
ETSE	006/2012	LTs 230 KV SE Abdon Batista	05/10/2042
LUMITRANS	007/2004	LT Machadinho - Campos Novos	02/18/2034
STC	006/2006	LT Barra Grande - Lages - Rio do Sul	04/27/2036
TRANLESTE	009/2004	SE Montes Claros - SE Irapé	02/18/2034
TRANSUDESTE	005/2005	SE Itutinga - SE Juiz de Fora	03/04/2035
TRANSIRAPÉ	012/2005	SE Irapé - SE Araçuaí 2	03/15/2035
MARIANA	011/2014	LT Itabirito 2 - Vespasiano 2 CS 500 KV	05/02/2044
MIRACEMA	017/2016	Transmission Line Miracema - Lajeado LT Lajeado – Palmas SE Palmas	06/27/2046
JANAÚBA	017/2017	LT Pirapora 2 - Janaúba 3 LT Janaúba 3 - Bom Jesus da Lapa 2	02/09/2047
AIMORÉS	004/2017	LT Padre Paraíso 2 - Governador Valadares 6	02/09/2047
PARAGUAÇU	003/2017	LT Poções 3 - Padre Paraíso 2	02/09/2047
IVAÍ	022/2017	LT Foz do Iguaçu - Guaíra SE Guaíra (new yard) LT Guaíra - Sarandi SE Sarandi (new yard) LT Sarandi - Londrina LT Sarandi – Paranavaí do Norte SE Paranavaí do Norte	08/11/2047

The projects operated by TAESA are distributed over the Brazilian territory, as follows:



## MISSION

TAESA's mission statement is to transmit electricity with excellence, in a continuous and efficient way, ensuring profitability and sustainability.

## VISION

By the end of 2018, TAESA intends to be the electricity transmission company in the Brazilian private sector with greatest market value, achieving this goal through sustainable growth and excellence in operational efficiency.

## PRINCIPLES AND VALUES

TAESA adopts the following principles and values as commitments:

- Transparency
- Security
- Focus on Results
- Sustainability
- Spirit of Excellence
- Employee Appreciation
- Commitment
- Innovation
- Environmental Preservation
- Ethical and Respectful Behavior

## ORGANIZATION AND MANAGEMENT

The process of technical management of the concessions is established through the TAESA guidelines and represented in the following diagram:

### TECHNICAL EXECUTIVE BOARD



## MANAGEMENT MECHANISMS

Among the several models in force related to Process Management with the market, TAESA adopts the best management mechanisms to refine, control and establish internal procedures that add confidence and standardization for its activities.

### ENVIRONMENTAL MANAGEMENT SYSTEM

In compliance with the best practices adopted by the major national and international companies, TAESA is constantly seeking to enhance policies and processes aiming at implementing the Environmental Management System (EMS).

Through this tool, it is possible to obtain continuous improvements for the services performed by the Company, thus enabling its development and providing solutions to minimize its environmental needs.

### Personnel Management

The development process for TAESA's employees must be understood as a business strategy and is an integral part of its management model. All investments related to this subject serve a strategic function to ensure, in the present and in the future, availability of the competences required to provide business leadership.

By making continuous investments in the growth and development of its employees, TAESA prepares them to create and offer better results for the business.

Furthermore, Human Resources strategies summarize a set of principles, concepts and an action cycle aimed at the development, quality of life and motivation of employees, and, consequently, at the Company's success.

TAESA ensures all its employees, in an ethical and transparent manner, equal opportunities, respect for diversity, the possibility of developing a solid career, remuneration compatible with the market, attractive benefits in a challenging and motivating environment and, also acts as a facilitator of information flow, promoting an objective, direct and two-way communication, that is respectful and transparent.

Following are listed certain assumptions to illustrate the attention given to TAESA Group's employees:

### ATTRACTION AND RETENTION OF TALENTS

TAESA believes that people are the company's propelling instruments, capable of providing it with the intelligence and learnings indispensable for continuous renovation and competitiveness in an environment of changes and challenges. Accordingly, people achieve their professional growth by using their talents to face challenging work situations. Thus, TAESA adopted the Internal Recruitment practice, i.e., to search for new professionals in the market. Opportunities are also offered to the Company's employees, promoting real growth and development opportunities, stimulating professional growth, retaining talents and valuing human capital.

## TRAINING

TAESA'S Training Policy aims at promoting and providing learning actions and strategies that make it possible for employees to acquire and improve competences, skills and knowledge that may contribute to his/her professional development, reflecting the value given to the individual and meeting the quality and productivity standards necessary to accomplish the Company's mission and vision. TAESA intends to continue to broaden its training actions, motivating and supporting employees in his/her training initiatives aimed at the development of institutional and individual competences.

## JOB AND SALARY PLAN

The aim of TAESA'S remuneration policy is to define and maintain equitable criteria for valuation and development, aiming at reaching an internal and external competitive balance in its structures of positions and salaries, as well as benefit plan. Therefore, the Company counts on its own professional structure for executive support and on the external consulting support, which is independent and renowned in the market when required. TAESA's job structure is in line with the salaries offered in the industry. Furthermore, employees are entitled to a variable remuneration, aligned with the Company's financial results, together with the achievement of levels above those expected for the responsibilities established for their positions.

## COMMUNICATION PROCESS

TAESA believes that effective communication is one of the most important aspects of the success of large organizations. Accordingly, aiming at being increasingly closer to its employees, the Company made great investments in communication processes, implementing several vehicles that provide for a strengthening of the bond and trust between the Company and its employees, creating a culture where information is shared at all levels.

## OCCUPATIONAL SAFETY

In its search to commit its employees with a safety culture, in 2018, one of the main pillars of the Company, TAESA sponsored a number of training and updating courses on safety rules and defensive driving. Safety indicators, which serve as a basis for Safety analysis, allow the Company to plan actions to prevent accidents.

## RISK MANAGEMENT

(AMOUNTS EXPRESSED IN THOUSANDS OF REAIS, UNLESS OTHERWISE INDICATED) THE REFERENCE BASE YEAR FOR THE AMOUNTS PRESENTED IS 2018, CONSIDERING THE ANNUAL CLOSING).

### Risk management structure

Risk management of the Company and its subsidiaries intends to identify and analyze risks considered relevant by Management, including market (currency, interest rate and other operating risks), credit and liquidity risks.

The Company and its subsidiaries do not contract or trade financial instruments, including derivative financial instruments for speculative purposes.

### Capital risk management

The Company and its subsidiaries manage its capitals to ensure the maintenance of its regular activities and, at the same time, maximize return to all stakeholders or parties involved in its operation, through debt and equity balance optimization.

Capital structure is formed by net indebtedness, that is, loans and financing, derivative financial instruments and debentures, less cash and cash equivalents, securities, and shareholders' equity.

### Categories of financial instruments (R\$ thousand)

	Consolidated		Parent company	
	12/31/2018	12/31/2017	12/31/2018	12/31/2017
<b>FINANCIAL ASSETS</b>				
Fair value through profit or loss:				
Securities	802,943	574,035	635,501	483,794
Cash equivalents	20,044	55,755	18,832	55,755
Amortized cost:				
Cash and banks	825	925	648	823
Accounts receivable from concessionaires and permissionaires (*)	172,818	188,403	161,115	174,894
Concession financial assets (*)	-	5,234,481	-	4,463,737
	<b>996,630</b>	<b>6,053,599</b>	<b>816,096</b>	<b>5,179,003</b>
<b>FINANCIAL LIABILITIES</b>				
Fair value through profit or loss:				
Loans and financing	382,787	321,718	382,787	321,718
Derivative financial instruments	(29,853)	34,243	(29,853)	34,243
Other financial liabilities at amortized cost:				
Suppliers	58,314	39,297	35,262	26,077
Loans and financing	37,744	47,045	27,948	34,800
Debentures	2,879,424	2,636,396	2,879,424	2,636,396
Advance Apportionment and Adjustment Portion	35,768	27,406	32,874	25,746
	<b>3,364,184</b>	<b>3,106,105</b>	<b>3,328,442</b>	<b>3,078,980</b>

(\*) Up to December 31, 2018, it was classified as Loans and receivables.

### Market risk management

The Company and its subsidiaries are exposed to financial risks resulting from sudden changes in the economic scenario, which are caused by changes in foreign exchange rates and interest rates, and inflationary expectation.

### Exchange rate

Foreign exchange risk is the risk that fair values of a financial instrument future cash flows change due to changes in foreign exchange rates. The Company's exposure to risk of changes

In foreign exchange rates, refer mainly to the Company's obligations involving borrowings, financing, financial investments and securities, subject to variable interest rates.

In Brazil, the depreciation of Real against Dollar may give rise to a price increase in all economic areas. A scenario of currency instability with eventual depreciation of the Brazilian real may cause loss to the Company's results in future periods. The Company is subject to currency risk in the loans denominated in a currency other than the Company's functional currency, the Real (R\$).

On December 31, 2018, the Company had 13.9% (R\$382,787) of its total debt (loans and financing and debentures) linked to foreign exchange rate. To mitigate this risk, the Company contracted derivative financial instruments ("swap") to protect total principal and interest future payments from fluctuations in US dollar and in interest rate (Libor). The Company intends to settle both instruments on the same date.

### Interest rate:

The Company and its subsidiaries' income is adjusted on a monthly basis at inflation rates. In case of deflation, the concessionaires will have their income reduced. In case of sudden increase of inflation, the concessionaires could not have their income timely adjusted, consequently suffering impacts on income (loss).

To minimize the risk of raising insufficient funds with adequate costs and reimbursement periods, the Company permanently monitors its obligations' payment schedule and cash generation. There were no changes in Company's market risk or in the management and measurement method of these risks.

The Company and its subsidiaries are exposed to fluctuations of floating interest rate for loans and financing, debentures and financial investments. This risk is administered by monitoring changes in interest rates and by maintaining a proper mix of assets and liabilities denominated in floating interest rates.

### Derivative financial instruments

The Company and its subsidiaries contract derivative financial instruments to administer their exposure to risk related to foreign exchange rate, i.e., foreign exchange swap without cash - US\$ versus CDI.

The transactions are registered with clearance and custody chambers. There is no margin deposited in guarantee, and the operation has no initial cost.

	Citibank foreign exchange swap - Renegotiation - 05/11/2018	Citibank foreign exchange swap - Renegotiation
Reference value (Notional) as of 12/31/2018	USD 98,592	-
Reference value (Notional) as of 12/31/2017	-	USD 94,340
The company's right to receive (long leg)	(3-month Libor + Spread: 0.34%) (1) 1.17647	(3-month Libor + Spread: 1.99%) (1) 1.17647
The company's obligation to pay (short leg)	106.0% of CDI	114.0% of CDI
Maturity on	05/10/2023	09/20/2019
Long position - 12/31/2018	382,787	-
Short position - 12/31/2018	(352,934)	-
"Swap" assets (liabilities) as of 12/31/2018 <sup>(2)</sup>	29,853	-
"Swap" assets (liabilities) as of 12/31/2017 <sup>(2)</sup>	-	(48,790)
Amount receivable (payable) as of 12/31/2018	29,853	-
Amount receivable (payable) as of 12/31/2017	-	(34,243)
Fair value as of 12/31/2018	29,853	-
Fair value as of 12/31/2017	-	(34,243)
Gains (losses) in 2018	24,145	15,377
Gains (losses) in 2017	-	(15,773)

(1) Factor 1.17647 represents gross up of income tax owed upon amortization and interest payments.

(2) Unrealized gains recorded in the parent company's balance sheet and in consolidated balance sheet, deriving from foreign exchange swap.

## Sensitivity analysis of financial instruments and derivatives

The Company and its subsidiaries carried out sensitivity analyses as required by accounting practices and CVM Instruction 475/08, prepared based on net exposure to variable rates of relevant derivative and non-derivative asset and liability financial instruments outstanding at the end of this report's period, assuming that the value of assets and liabilities below were outstanding during the entire period, adjusted based on rates estimated for a probable scenario of risk behavior that may generate adverse results, in case it occurs.

Rates used to calculate probable scenarios are referenced by an independent, external source, and these scenarios are used as the basis to define two additional scenarios with deterioration of 25% and 50% in risk variable (scenarios A and B, respectively) considered for net exposure, when applicable, as follows:

	Probable scenario	Scenario A (25% deterioration)	Scenario B (50% deterioration)	Realized up to December 31, 2018
CDI (i)	6.50%	8.13%	9.75%	6.40%
IPCA (i)	3.85%	4.81%	5.78%	3.75%
Libor (ii)	2.6083%	3.2603%	3.9124%	2.7939%
PTAX - USD (i)	3.8000	4.7500	5.7000	3.8748

(i) According to data disclosed by the Central Bank of Brazil (BACEN) (Focus Report - Medium-term Median Top 5), on March 08, 2019. (ii) As rates disclosed on Bloomberg website on March 08, 2019.

Sensitivity analysis of the net exposure of financial instruments to an increase in interest rates and/or foreign exchange	12/31/2018	Effect on income before taxes - 2018 – increase (decrease)		
		Probable	Scenario A	Scenario B
<b>Unhedged - Consolidated</b>				
<b>FINANCIAL ASSETS</b>				
Cash equivalents and securities				
- CDI	822,987	823	14,197	27,570
<b>FINANCIAL LIABILITIES</b>				
Debentures				
- CDI	292,996	(307)	(5,068)	(9,830)
- IPCA	2,607,855	(2,725)	(27,826)	(52,926)
		<b>(2,209)</b>	<b>(18,697)</b>	<b>(35,186)</b>
<b>Unhedged – Parent Company</b>				
<b>FINANCIAL ASSETS</b>				
Cash equivalents and securities				
- CDI	654,333	654	11,287	21,920
<b>FINANCIAL LIABILITIES</b>				
Debentures				
- CDI	292,996	(307)	(5,068)	(9,830)
- IPCA	2,607,855	(2,725)	(27,826)	(52,926)
		<b>(2,378)</b>	<b>(21,607)</b>	<b>(40,836)</b>
<b>With hedge - Parent company and Consolidated</b>				
<b>FINANCIAL LIABILITIES (protected debt)</b>				
Loans and financing				
- Libor	382,788	(2,496)	(5,616)	(8,736)
- Dollar	382,788	19,403	(71,443)	(162,290)
Derivatives				
Asset leg – Libor	(382,788)	2,496	5,616	8,736
Asset leg – Dollar	(382,788)	(19,403)	71,443	162,290
Liability leg - CDI	352,935	(370)	(6,105)	(11,840)
<b>Net effect</b>		<b>(370)</b>	<b>(6,105)</b>	<b>(11,840)</b>

## Credit Risk Management

Credit risk refers to the risk of a counterparty not complying with its contractual obligations, thus causing the Company and its subsidiaries to incur financial losses. This risk derives basically from investments held with Banks and financial institutions.

Credit risk of funds and derivative financial instruments is limited because counterparties are represented by Banks and financial institutions that have satisfactory credit rating levels, showing great likelihood that no counterparty fails to comply with its obligations.

As regards credit risk deriving from client transactions and concession financial asset, Management understands that it is not necessary to recognize a provision for losses or credit analyses in relation to its clients, as CUST, entered into by ONS and the Company and its subsidiaries, ensures receipt of amounts owed by users for services provided through a Contract for the Constitution of Guarantee - CCG and Bank Guarantee Letter - CFB. Main advantages of these protection mechanisms are: (a) Diluted risks, as every user pays all the transmission companies; (b) Financial guarantees are provided individually by users; and (c) payment discussions take place between transmission companies and users. In case of non-payment, the Company as a transmission agent may request ONS to resort to the user's bank guarantee in connection with the guarantee agreement (CCG) or bank letter of guarantee (CFB).

## Liquidity risk management

The liquidity risk refers to the Company's and its subsidiaries' risk of being unable to honor their obligations and their financial position.

The Company and its subsidiaries manage liquidity risk by maintaining proper reserves and bank credit facilities - and they also manage liquidity risk to raise loans - through monitoring cash flows and maturity profiles.

The table below: (a) shows in detail the remaining contractual maturity of non-derivative financial liabilities (and the contractual repayments terms of the Company and its subsidiaries); (b) was prepared in accordance with financial liabilities undiscounted cash flows based on the closest date in which the Company and its subsidiaries shall settle respective obligations; and (c) includes interest and principal cash flows.

Loans financing and debentures	Up to 1 month	1-3 months	3-12 months	1-5 years	>5 years	TOTAL
Post-fixed	-	9,392	506,725	2,038,221	520,695	3,075,033
Prefixed	828	1,654	7,387	30,075	37	39,981
Derivative financial instruments	-	5,706	20,346	120,450	-	146,502
<b>Consolidated</b>	<b>828</b>	<b>16,752</b>	<b>534,458</b>	<b>2,188,746</b>	<b>520,732</b>	<b>3,261,516</b>
Postfixed	-	9,392	506,725	2,038,221	520,695	3,075,033
Prefixed	605	1,208	5,394	22,452	37	29,696
Derivative financial instruments	-	5,706	20,346	120,450	-	146,502
<b>Parent company</b>	<b>605</b>	<b>16,306</b>	<b>532,465</b>	<b>2,181,123</b>	<b>520,732</b>	<b>3,251,231</b>

## Management of operating risks

It is the risk of direct or indirect losses arising from different causes related to the Company's processes, personnel, technology and infrastructure and external factors, except credit, market and liquidity risks, as those arising from legal and regulatory requirements and from generally accepted corporate behavior standards:

## **REGULATORY RISKS**

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Extensive governmental legislation and regulation issued by the following bodies: Ministry of Mines and Energy - MME, ANEEL, ONS, Ministry of Environment and Brazilian Securities Commission (CVM).

## **INSURANCE RISK**

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Hiring of operating risk and civil responsibility insurance for their substations. Damage to transmission lines such as losses due to fire, lightning, explosions, short-circuits, and electricity outage are not covered by this insurance, which may give rise to significant costs and additional investments.

## **RISK OF INTERRUPTION IN SERVICES**

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In case of interruption in services, the Company and its subsidiaries will be subject to reduction in their income due to application of certain penalties, depending on the type, level and duration of service unavailability, as rules established by regulatory body. In case of extended interruptions, the effects may be relevant.

## **RISK OF CONSTRUCTION AND DEVELOPMENT OF INFRASTRUCTURES**

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In the event the Company and its subsidiaries shall expand its business by constructing new transmission installations, it may incur in risks inherent to the construction activity, delays in the execution of the work, and potential environment damages that may result in costs not provided for and/or penalties since may rely on third-parties in order to provide equipment used in facilities and, for that, they are subject to price increases and failures on the part of such suppliers, including delays in delivery of equipment or delivery of damaged equipment. Such failures could adversely affect the activities and have an adverse effect on the results.

## **TECHNICAL RISK**

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The concessions' infrastructure is dimensioned according to technical directions imposed by local and international standards. Nevertheless, some event of Act of God or force majeure may cause economic and financial impacts bigger than those provided for in the original project. In such cases, the costs necessary to replace installations in operating conditions should be supported by the Company and its subsidiaries, even if eventual unavailability of its transmission lines do not generate reduction in income (Variable Portion).

## **LITIGATION RISK**

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The Company and its subsidiaries are parties to a number of lawsuits and administrative proceedings which are followed-up by legal advisors. The Company periodically analyzes information made available by its legal advisors to conclude on likelihood of obtaining success in lawsuits, avoiding financial losses and damage in reputation and seeking for cost effectiveness.

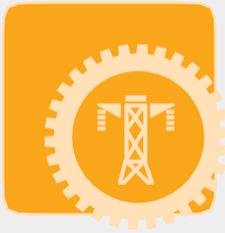
Top Management is responsible for developing and implementing controls to mitigate operating risks.



Proper function segregation requirements, including independent authorization of operations;



Transaction reconciliation and monitoring requirements.



Requirements of periodic evaluation of operating risks and adequacy of controls and procedures to address identified risks.



Operating loss reporting requirements and proposed corrective measures.



Documentation of controls and procedures.



Risk mitigation, including insurance, if effective.



Compliance with regulatory and legal requirements.



Development of contingency plans.



Ethical and commercial standards.



Training and professional development.

Fair value of derivative and non-derivative financial instruments - In thousands of Reais  
(Fair value hierarchy of financial instruments measured at fair value through profit or loss)

	12/31/2018	12/31/2017	Fair value hierarchy
CONSOLIDATED AND PARENT COMPANY			
Loans and financing	382,787	321,718	Level 2
Derivative financial instruments	(29,853)	34,243	Level 2
Financial liabilities	<b>352,934</b>	<b>355,961</b>	

The different levels were defined as follow:



There was no change in the level of these financial instruments in the period ended December 31, 2018.

Fair value of financial instruments not measured at fair value through profit or loss (however, fair value disclosures are required)

Except as detailed in table below, Management considers that accounting values of other financial assets and liabilities not measured at fair value and recognized in this financial information approximate their fair values.

	Book value	Fair value	Book value	Fair value	Fair value hierarchy
Consolidated		12/31/2018		12/31/2017	
Concession financial assets - Financial assets	-	-	5,234,481	6,084,647	Level 3
Debentures - Financial liabilities	2,879,424	2,927,641	2,636,396	2,604,585	Level 2
Parent company		12/31/2018		12/31/2017	
Concession financial assets - Financial assets	-	-	4,463,737	5,297,281	Level 3
Debentures - Financial liabilities	2,879,424	2,927,641	2,636,396	2,604,585	Level 2

## DEBENTURES

Management considers that debentures' accounting balances, classified as "other financial liabilities at amortized cost" approximate their fair values, except when these debentures have Unit Price - PU in secondary market close to report period. Except for the 4<sup>th</sup> series of 2<sup>nd</sup> issuance of debentures by the Company, other series presented negotiations in secondary market on December 31, 2017 and 2016, whose fair values were measured based on these quotations.

As regards other financial assets and liabilities not measured at fair value, Management considers that book values approximate fair values, as: (i) they have average receipt/ payment period of less than 60 days; (ii) they are concentrated on fixed income securities remunerated at CDI rate; and (iii) there are no similar instruments with comparable maturities and interest rates.

## RESPONSIBILITY WITH STAKEHOLDERS

The following tables briefly present the main stakeholders of **TAESA**, detailing the types of relationships maintained.

### SHAREHOLDERS AND INVESTORS

**Details** TAESA Group is controlled by Companhia Energética de Minas Gerais - Cemig and ISA Investimentos e Participações do Brasil S.A. CEMIG is controlled by the State of Minas Gerais and is one of the most sound and important groups in the electric sector in Brazil. ISA Investimentos e Participações do Brasil S.A. is a holding company whose main purpose is to consolidate the investments made in Brazil by ISA Interconexión Eléctrica S.A. E.S.P., one of the largest international electric power transmission companies in Latin America. **TAESA** holds 63.45% of the shares traded in the market. One of **TAESA's** main objectives is to maximize the value for its shareholders, emphasizing the long-term business sustainability, providing a high quality core service and respecting the rules established by Brazilian regulatory authorities.

**Communication Channels** The **TAESA** Group's main communication channel is its website ([www.taesa.com.br/ri](http://www.taesa.com.br/ri)), in addition to the direct e-mail from the Investor Relations department ([investor.relations@taesa.com.br](mailto:investor.relations@taesa.com.br)) and the contact telephone number of the IR team (+55 21 2212-6060). Meetings of management bodies (General Shareholders' Meeting) and annual public meeting with analysts.

### CLIENTS

**Details** The TAESA Group's customers are the electric power generators, free consumers, distributors and other transmission companies that connect or share their facilities with the Group. The Relationship Policy is guided by the Company's Quality Policy and Code of Ethics.

**Communication Channels** The forms of communication are usually established directly among the parties, through technical contacts, meetings, meetings at sectorial events, participation in class associations, and whenever there is a technical issue to be resolved by mutual agreement.

### SUPPLIERS

**Details** The largest suppliers of the TAESA Group are manufacturers of large electrical equipment (transformers, circuit breakers, protective equipment, lightning rods, reactors, measuring transformers, etc.). There are also engineering and environmental advisory companies that provide services to the Group, both in projects (civil, electrical and mechanical parts) and in the performance of environmental programs and conditions established by the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). Another branch of activity of suppliers is office supplies, airline ticket and lodging reservations, vehicles, freight and insurance.

**Communication Channels** The TAESA Group establishes strict registration and engagement standards for suppliers, aiming to make such processes transparent and auditable, and has developed standards for registration of suppliers, bids and bid evaluation. The support base for the Company's supply area is the SAP tool.

## EMPLOYEES, COLLABORATORS AND OTHERS

**Details** The **TAESA** Group has a total of 587 employees (base date: December 31, 2018 - including ATEIII, Miracema and Janaúba). The relationship policy is governed by the Human Resources Policy and by the Group's Code of Ethics, as well as the compliance with labor legislation.

**Communication Channels** Team meetings, meetings with the executive board, corporate e-mail, celebration of the birthdays of the month, intranet, electronic board, personalized newsletters from the areas, corporate policy disclosure, annual performance evaluation.

## PUBLIC BODIES

**Details** The public bodies with which the **TAESA** Group most frequently interact with are as follows: ANEEL, the Ministry of Mines and Energy (MME), the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA), Environmental Departments, the National Operator of the Electric System (ONS), among others.

**Communication Channels** The relationship with these public bodies occurs as follows:

- with ANEEL: by sending information and correspondence regarding the issued Resolutions; the same for corporate information of an accounting nature; through solicitations of consent in specific business processes; through participation in meetings and public hearings promoted by the Agency; through participation in auctions of new transmission lines.
- with the MME: by sending and tracking correspondence; through meetings when the issue requires.
- with IBAMA: by attending to its obligations of the environmental programs; by means of technical meetings when the issue requires; by means of clarification provided.
- with ONS: through exchanges of correspondence and technical information; by means of technical meetings when the issue requires; through participation in its Board of Directors.

## SOCIAL, ENVIRONMENTAL AND COMMUNITY ORGANIZATIONS

**Details** The **TAESA** Group's relationship policy is guided by its Code of Ethics, available on its website ([www.taesa.com.br](http://www.taesa.com.br)), by the concession contracts and by the legislation.

**Communication Channels** The **TAESA** Group's website provides information on the Group's projects and also provides a toll-free telephone number for complaints, inquiries and other contacts. Regarding R&D and Social Project Programs, the relationship channel is through the website or directly with the responsible area.

## OPERATIONAL AND PRODUCTIVITY INDICATORS OR TECHNICAL DATA

The results from productivity achieved in 2018 are presented in the table below.

### Operational and Productivity Indicators - Technical Data for 2018 - TAESA

Number of own employees	587
Number of outsourced employees	0
Substations (in units)	41(*)
Installed capacity (MVA)	6750 MVA
Transmission lines (in km)	5764 km

(\*) Number of shared substations, of which seven (7) are owned by Taesa's concessions. One (1) substation under construction.

(\*\*) December 31, 2018 – Considering ETEO, TSN, NVT, Munirah, GTESA, PATESA, NTE, ATE, ATE II, ATE III, STE and São Gotardo.

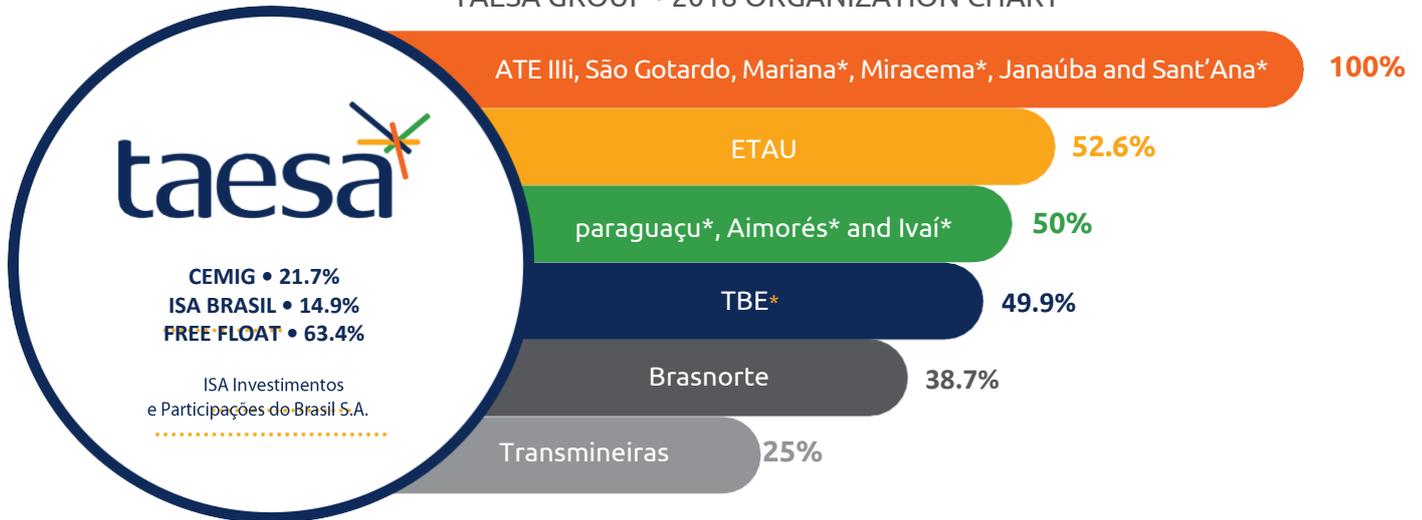


## DIMENSION CORPORATE GOVERNANCE

Since it is a publicly-held company, TAESA entered into the Agreement on Adoption of Differentiated Corporate Governance Practices with the São Paulo Stock Exchange (Bovespa) as of October 5, 2006. By signing this instrument, TAESA complied with the “Regulation of Differentiated Level 2 Corporate Governance Practices” and also with the “Regulation of the Market Arbitration Chamber”, both issued by b3 S.A. – brasil, bolsa, balcão S.A. (“b3”). The Company is also subject to the documents issued by the Brazilian Corporate Governance Institute (IBGC) and the Brazilian Securities Commission.

– CVM. The corporate structure of TAESA in 2018 is presented below.

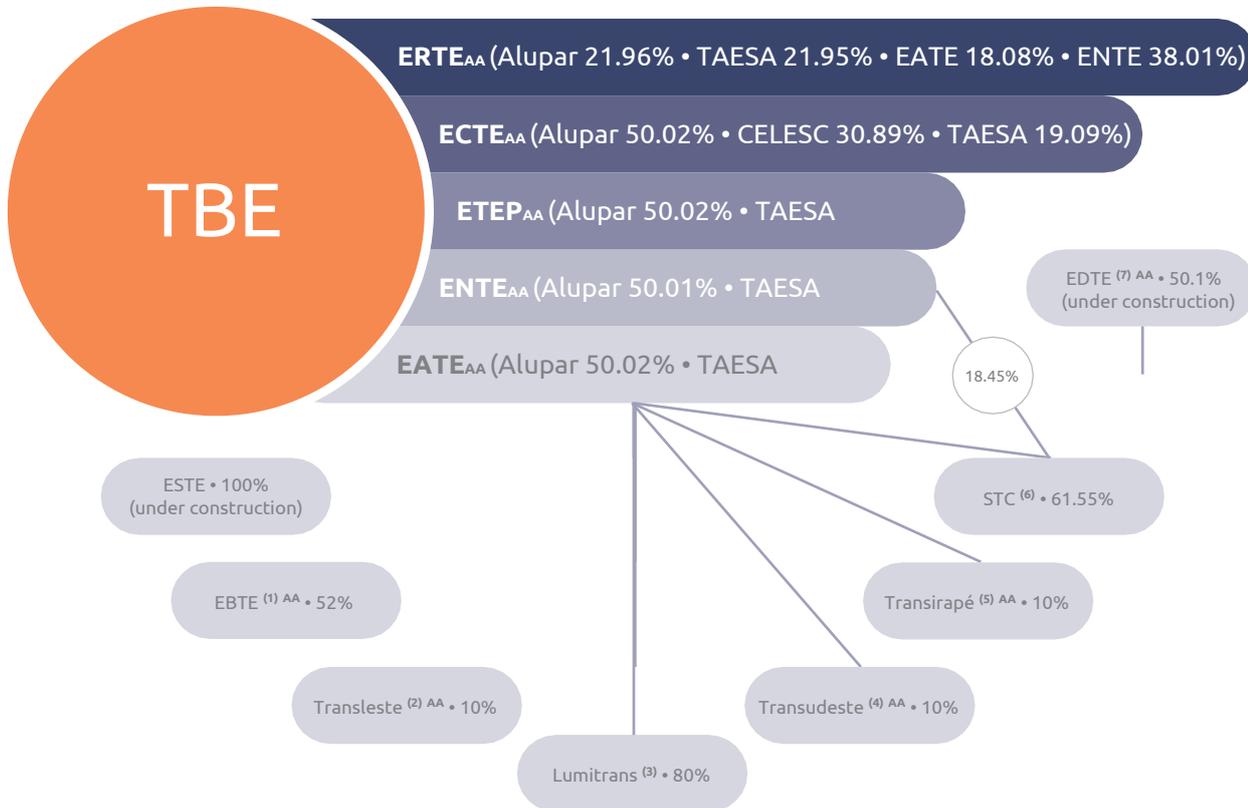
TAESA GROUP • 2018 ORGANIZATION CHART



\* Under construction

\*TBE or TBE Group is a group of 15 electric power transmission concessionaires - Indirect Participation.

CORPORATE ORGANIZATION CHART • TBE



AA - companies that have Shareholders' Agreements.

(1) TAESA - 49%; (2) Transminas - 41%; TAESA - 25% and Furnas - 24%; (3) Alupar - 15% and Auto Invest - 5%; (4) Transminas - 41%; TAESA - 24% and Furnas - 25%; (5) Transminas - 41%; TAESA - 24.5% and Furnas - 24.5% (6) Alupar - 20% (7) TAESA - 24.95% e Apollo 12 - 24.95%.

(1) On November 30, 2017, the transfer to TAESA of the ownership interest held by CEMIG in the capital of the following concessions was completed: Companhia Transleste de Transmissão S.A. ("Transleste"), Companhia Transudeste de Transmissão S.A. ("Transudeste") and Companhia Transirapé de Transmissão S.A. ("Transirapé") (all under joint control, referred to as "Transmineiras"). TAESA already had 5% of indirect interest in each concession through TBE, and after completing this corporate restructuring, TAESA became the direct and indirect holder of 30.0% in Transleste, 29.0% in Transudeste and 29.5% in Transirapé.

(2) TBE is the trade name for the set of 15 concessions, including Transmineiras.

(3) In 2018, the Company took part in Eletrobrás Auction No. 01/2018 and placed minimum bids for acquisition of ownership interests held by Eletrobrás at ETAU, Brasnorte and Transmineiras. In addition, the Company announced the purchase of controlling interest in four operating transmission assets from Ambar Energia Ltda. (São João Transmissora de Energia S.A., São Pedro Transmissora de Energia S.A., Vale do São Bartolomeu Transmissora de Energia S.A. and Triângulo Mineiro Transmissora de Energia S.A.). The closing and consummation of both operations are subject to conditions precedent in addition to approvals of proper bodies.

## STATUTORY INFORMATION

### CAPITAL

TAESA's capital totals three billion, sixty-seven million, five hundred and thirty-five thousand, one hundred and ninety-three reais and twenty-eight centavos (R\$ 3,067,535,193.28), fully subscribed and paid-in, represented by one billion, thirty-three million, four hundred and ninety-six thousand, seven hundred and twenty-one (1,033,496,721) shares, of which five hundred and ninety million, seven hundred and fourteen thousand and sixty-nine (590,714,069) common shares and four hundred and forty-two million, seven hundred and eighty-two thousand, six hundred and fifty-two (442,782,652) preferred shares, all of them nominative and registered shares with no par value.

### SHAREHOLDERS' AGREEMENT

The controlling shareholders of TAESA Companhia Energética de Minas Gerais - Cemig and ISA Investimentos e Participações do Brasil S.A. entered into a "Shareholders' Agreement" with a view to regulating the Company's joint management.

The purpose of this Agreement is to govern the relationships and establish the rights and obligations of the controlling shareholders of TAESA, specifically:

- The assumptions and principles to be adopted by Companhia Energética de Minas Gerais - Cemig and by ISA Investimentos e Participações do Brasil S.A. with respect to the Agreement, to the Company and to its Subsidiaries;
- the exercise of voting rights in the Company and its Subsidiaries and Associated Companies;
- the form of administration of the Company and its Subsidiaries;
- the Company's capitalization, investment, financing and dividend policies;
- the rules applicable to the encumbrance and transfer of shares;
- the preemptive right in the subscription of shares and other securities issued by the Company;
- the form of dispute settlement.

### EXECUTIVE BOARD

TAESA's Executive Board will be comprised of six (6) board members, shareholders or who are not necessarily shareholders, resident in the country, being one (1) Technical Director, one (1) CFO and Investor Relations Officer, one (1) CLO and Regulatory Officer, one (1) Chief Executive Officer and one (1) Implementation Officer, all elected by the Board of Directors for an unified two-year (2) mandate, dismissible at any time, being allowed the accumulation of positions and the total or partial reelection of its members, pursuant to resolution of the Board of Directors. Currently, the positions of Legal and Regulatory Officer, CEO, and Implementation Officer of the Company are vacant. The table below shows the breakdown of the TAESA's executive board as of December 2018.

EXECUTIVE BOARD	
CEO	Raul Lycurgo Leite
CFO and Investor Relations Officer	Marcus Pereira Aucélio
Chief Technical Officer	Marco Antônio Resende Faria
Business and Ownership Interest Management Officer	José Aloise Ragone Filho
Chief Legal and Regulatory Officer	Raul Lycurgo Leite
Implementation Officer	Vacant position

Up to 1/3 (one third) of the Board of Directors members may be elected for the position of Officer. The Company's CEO accounts for his acts to the Board of Directors. The other Directors account for their acts to the CEO, being also subject to, as well as the CEO, supervision by the Board of Directors and Audit Committee, pursuant to the Brazilian Corporations Act.

## BOARD OF DIRECTORS

The TAESA's Board of Directors is composed of eleven (11) sitting members and their respective alternate members, Brazil residents or residents of other countries, elected by the General Meeting, with a unified term of office of one (1) year, with reelection permitted.

In accordance with the Company's Shareholders' Agreement, it is incumbent upon ISA INVESTIMENTOS E PARTICIPAÇÕES DO BRASIL S.A. ("ISA") to appoint four (4) sitting members and respective alternates and upon COMPANHIA ENERGÉTICA DE MINAS GERAIS - CEMIG ("CEMIG") to appoint five (5) full members and respective alternates. The other members of the Board of directors will be elected pursuant to item 5.3 of Corporate Governance Regulation Level 2 of B3 S.A. – Brasil, Bolsa Balcão.

After the election of the members of the Board of Directors, the Chairman of the Board of Directors will be chosen among the elected members, and once members of this body are elected, it shall be observed that the job titles of Chairman of the Board of Directors and of Chief Executive Officer cannot be assigned to the same person. The Chairman of the Board of Directors shall be responsible for chairing the Board of Directors meetings.

Any member of the Board of Directors will have the right to be represented at the Board of Directors' Meetings by another Board member appointed as their alternate, provided that (i) the alternate was appointed by the same shareholder who appointed the alternate; and (ii) the alternate member is duly empowered to represent the member.

BOARD OF DIRECTORS	
MEMBERS	ALTERNATE MEMBERS
José Maria Rabelo	Daniel Faria Costa
José Afonso Bicalho Beltrão da Silva	Arthur Maia Amaral
Paulo de Moura Ramos	Vacant position
Jorge Raimundo Nahas	Marcelo Rocha
Alcione Maria Martins Comonian	Paulo Henrique Rodrigues Coimbra
Bernardo Vargas Gibsone	César Augusto Ramírez Rojas
Ana Milena López Rocha	Daniel Isaza Bonnet
Hermes Jorge Chipp	Gustavo Carlos Marin Garat
Fernando Bunker Gentil	Fernando Augusto Rojas Pinto
François Moreau	Rômulo Greficce Miguel Martins
Celso Maia de Barros	Robert Patrick Panero

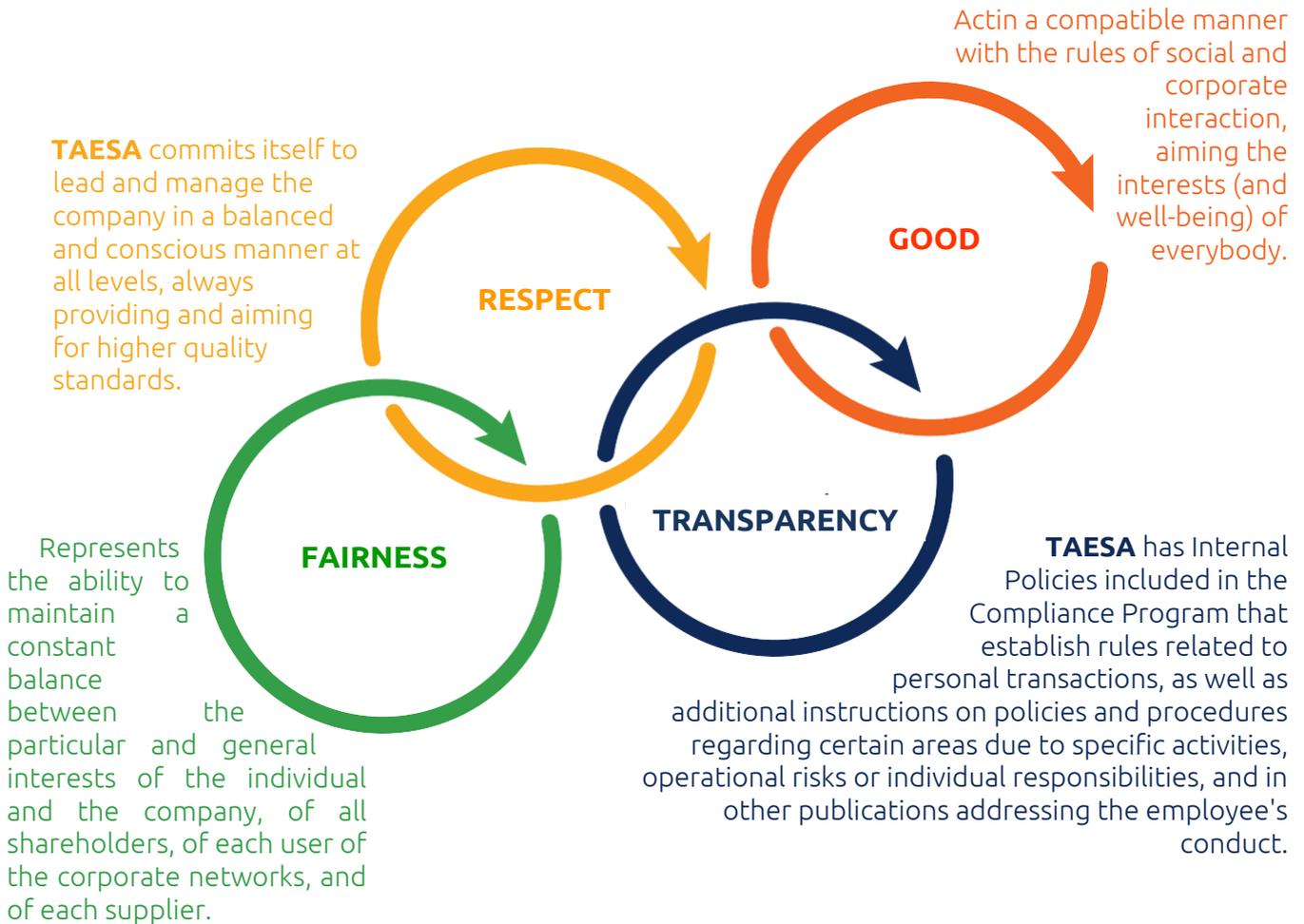
## AUDIT COMMITTEE

TAESA's Audit Committee is a permanent body, formed by a minimum of three (3) and a maximum of five (5) members and their respective alternates, whether shareholders or not, elected by the General Meeting. Said council has its duties and powers defined by law.

AUDIT COMMITTEE	
MEMBERS	ALTERNATE MEMBERS
Marco Antônio Resende Teixeira	Francisco Luiz Moreira Penna
Helvécio Miranda Magalhães Junior	Eduardo José de Souza
Manuel Domingues de Jesus e Pinho	João Henrique de Souza Brum
Vacant position	Ronald Gastão Andrade Reis
Marcello Joaquim Pacheco	Murici dos Santos

## CODE OF ETHICAL CONDUCT AND COMPLIANCE

The Code of Ethical Conduct and Compliance aims to help people distinguish the ambiguous and/or potentially dangerous situations that may arise during the performance of daily business activities, but also relationships or behaviors not perfectly clear which may involve the Company. The main guidelines of the document are as follows:



Regarding the expected behavior of managers and employees, the document defines:

**PROFESSIONAL LOYALTY**, which covers the following situations:

- Recognize cases of conflict between personal and business interests and resolve them in the interest of the Company;
- Do not adopt behaviors that may unlawfully influence public officials or employees of other companies to obtain favors from the Company; and
- Communicate in external relations that the rejection of certain behaviors is not only a formal but a substantial conduct.

**The same holds true for the principle of preserving the integrity of corporate assets: the Company belongs to all, and the integrity of its value is a guarantee to those who work in it.**

**CONFLICT OF INTEREST** between personal and company interests, occurring when a behavior or decision within the scope of the work activity itself can generate an immediate or deferred advantage for the individual himself/herself, his/her family members or acquaintances at the expense of the corporate interest.

Conflicts of interest have a direct effect on the person involved, limiting or influencing his/her objectivity of judgment. Anyone who sees or believes to be involved in a conflict of interest, or feels constrained to manage a professional situation due to outside influences or if he/she does not feel free in his/her decisions and in the performance of his/her own activities, he/she should indicate this to the person responsible or other persons indicated by the corporate procedures, to be clarified or to receive indications on how to behave, regardless of the type of courtesy or benefits received, degrees of kinship and familiarity or other variables.

**Regardless of the personal perception of a conflict of interest, compliance with the following general rules is mandatory:**

- Regarding courtesies or other forms of gifts, there are some that are part of normal business practices or courtesy, while others exceed this limit and may aim to obtain favors in business relationships. The Company prohibits its employees from accepting courtesies that exceed the established value of US\$ 100 or that are a source of doubt regarding its purpose. Gifts that are received as a courtesy of other companies, suppliers and customers may be accepted provided the estimated commercial value is compatible with the idea of "courtesy".
- The cases of first-degree relatives of the Company's employees and employees of their suppliers, customers, competitors or sectorial authorities should be indicated when their activity or function may have a reflection on the Company. In such cases, the Company's administrators must take measures to avoid any type of incompatibility arising from this situation.

According to the Code of Ethical Conduct and Compliance, aiming to prevent corruption-related behavior or behaviors that may be interpreted as such, the Company establishes a uniform conduct with respect to its own external courtesies. In general, they should aim to promote exclusively the image of the Company and its brand. For this reason, the Company:

- Does not accept any form of gift that may also be interpreted as being above the ordinary business practices or courtesy, or in any way aimed at obtaining favors in the performance of any activity. Specifically, the Company prohibits any form of gift that may influence the independence of judgment – or induce the obtainment of any advantage – aimed at public officials, auditors, board members of the Group, Company or their respective family members;
- To accept gifts over US\$ 100, the employee must inform his/her superior (at least of managerial level) and the Compliance area, which will record such situation in the database of gifts received and analyze the motivation, value, type, circumstances, frequency and profile of the person receiving the gift.
- If you receive or offer gifts below the stipulated amount of US\$ 100, no authorization is required.
- Exceptional cases must be submitted to the General Executive Board of TAESA and reported to the Board of Directors.

In any case, the Company refrain from practices not authorized by Law, by commercial uses or by the Codes of Ethics – if any – of the companies or entities with whom it has relations.

# DIMENSION

## ECONOMIC-FINANCIAL

The Company's financial statements comprise parent company's individual financial statements, referred to as parent company, consolidated financial statements, referred to as consolidated, were prepared according to accounting practices adopted in Brazil and International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB). Accounting practices adopted in Brazil comprise those included in the Brazilian corporations act and the technical pronouncements, guidelines and interpretations issued by the Accounting Pronouncement Committee - CPC and approved by the Federal Accounting Council - CFC and Brazilian Securities Commission - CVM.

The individual and consolidated financial statements were approved by the Executive Board and Board of Directors on March 28, 2019. On March 28, 2019, the Audit Committee expressed its favorable opinion and suggested to send it to the general shareholders' meeting.

### ECONOMIC AND FINANCIAL INDICATORS - DETAILS OF THE STATEMENT OF ADDED VALUE

Generation of Wealth (R\$ thousand)	2018		2017	
	R\$ thousand	%	R\$ thousand	%
OPERATING INCOME (Gross income from sales of electric power and services)	1,808,293	100.98	1,213,594	96.84
(-) INPUTS (Inputs acquired from third parties: Purchase of energy, materials, outsourced services, etc.)	(375,335)	-20.96	(194,750)	(15.54)
<b>Non-operating income</b>				
= GROSS ADDED VALUE	1,432,958	80.02	1,018,844	81.30
(-) Reintegration quotas (depreciation, amortization)	(6,400)	-0.36	(3,926)	(0.31)
= NET ADDED VALUE	1,426,558	79.66	1,014,918	80.98
+ ADDED VALUE TRANSFERRED (financial income, equity in income of subsidiaries)	364,169	20.34	238,331	19.02
<b>= ADDED VALUE PAYABLE</b>	<b>1,790,727</b>	<b>100.00</b>	<b>1,253,249</b>	<b>100</b>

### DISTRIBUTION OF WEALTH - BY STAKEHOLDERS

	2018		2017	
	R\$ thousand	%	R\$ thousand	%
Employees	105,729	5.90	101,386	8.09
Government (taxes, rates, contributions and sector charges)	339,593	18.96	211,229	16.85
Lenders	274,100	15.31	292,349	23.33
Withheld	213,255	11.91	55,357	4.42
Shareholders	858,050	47.92	592,928	47.31
<b>= DISTRIBUTED ADDED VALUE (TOTAL)</b>	<b>1,790,726</b>	<b>100.00</b>	<b>1,253,249</b>	<b>100</b>

Distribution of government wealth and sectorial charges	2018		2017	
	R\$ thousand	%	R\$ thousand	%
Taxes/rates/contributions	259,507	76.42	130,206	71.46
PIS/COFINS	92,765	27.32	55,353	26.30
CORPORATE INCOME TAX/SOCIAL CONTRIBUTION	147,363	43.39	55,379	38.88
Other	19,379	5.71	19,474	6.29
Sectorial charges	80,085	23.58	81,023	28.54
RGR	53,667	15.80	52,655	17.77
R&D	15,257	4.49	17,345	6.00
CDE	2,605	0.77	2,002	1.12
PROINFA	2,654	0.78	2,389	1.09
TFSEE	5,903	1.74	6,632	2.56
<b>= DISTRIBUTED VALUE (TOTAL)</b>	<b>339,593</b>	<b>100.00</b>	<b>211,229</b>	<b>100</b>

Other Indicators	2018 R\$ thousand	2017 R\$ thousand	Δ %
Gross operating income (In thousands of reais)	1,808,293	1,213,594	49.00
Deductions from income (R\$ thousand)	(173,056)	(136,535)	26.75
Net operating income (R\$ thousand)	1,635,237	1,077,059	51.82
Operating costs and expenses for services (R\$ thousand)	(506,638)	(319,377)	58.63
Income (loss) from rendering of services (R\$ thousand)	1,128,599	757,682	48.95
Financial income (R\$ thousand)	(211,187)	(222,596)	-5.13
Equity in net income of subsidiaries (R\$ thousand)	301,256	168,578	78.70
Corporate income tax/social contribution (R\$ thousand)	(147,363)	(55,379)	166.10
Net income (R\$ thousand)	1,071,305	648,285	65.25
EBTITDA (R\$ thousand) - standard	1,436,255	930,186	54.41
EBTITDA (R\$ thousand) - adjusted	1,134,999	761,608	49.03
EBITDA Margin (%) - standard	87.83%	86.36%	1.70
EBITDA Margin (%) - adjusted	69.41%	70.71%	-1.84
Current Liquidity	2.98	3.02	-1.29
General Liquidity	1.64	1.68	-2.44
Gross Margin (net profit/gross operating income) (%)	59.24%	53.42%	10.91
Net Margin (net profit/shareholders' equity) (%)	23.43%	14.91%	57.14
<b>Capital Structure</b>			
Own capital (%)	53.06%	53.97%	-1.69
Third-party capital (%)	46.94%	46.03%	1.98
Customer default (accounts overdue up to 90 days / Gross operating income in the last 12 months)	0,008,043	0,002,229	260.85

Balance sheet as of December 31, 2018 - PARENT COMPANY (Amounts expressed in thousands of reais - R\$)	Consolidated	
	12/31/2018	12/31/2017
<b>Current Assets</b>		
Cash and cash equivalents	20,869	56,680
Securities	798,604	569,902
Accounts receivable from concessionaires and permissionaires	159,200	174,785
Concession financial asset	863,892	1,028,109
Taxes and social contributions	35,688	46,663
Dividends and JCP receivable	5,580	18,699
Other accounts receivable and other assets	43,838	51,959
<b>Total current assets</b>	<b>1,927,671</b>	<b>1,946,797</b>
<b>Non-current Assets</b>		
Securities	4,339	4,133
Accounts receivable from concessionaires and permissionaires	13,618	13,618
Concession financial asset	4,592,202	4,206,372
Taxes and social contributions	26	26
Deferred taxes and contributions:	-	112
Derivative financial instruments	29,853	-
Other accounts receivable	18,301	16,975
Judicial deposits	28,295	26,843
Investments	1,912,943	1,780,935
Property, plant and equipment	23,218	23,277
Intangible assets	65,828	35,732
<b>Total non-current assets</b>	<b>6,688,623</b>	<b>6,108,023</b>
<b>TOTAL ASSETS</b>	<b>8,616,294</b>	<b>8,054,820</b>
<b>Current Liabilities</b>		
Suppliers	58,314	39,297
Loans and financing	10,751	9,165
Debentures	417,529	392,614
Taxes and social contributions	44,768	78,790
Regulatory fees	68,553	73,805
Dividends and JCP payable	7	6
Other accounts payable	46,883	51,101
<b>Total current liabilities</b>	<b>646,805</b>	<b>644,778</b>
<b>Non-current Liabilities</b>		
Loans and financing	409,780	359,599
Debentures	2,461,895	2,243,782
Derivative financial instruments	-	34,243
Deferred taxes and contributions:	163,738	96,567
Deferred taxes	286,886	275,109
Provision for labor, tax and civil risks	28,475	14,887
Other accounts payable	46,663	38,303
<b>Total non-current liabilities</b>	<b>3,397,437</b>	<b>3,062,490</b>
<b>TOTAL LIABILITIES</b>	<b>4,044,242</b>	<b>3,707,268</b>
<b>SHAREHOLDERS' EQUITY</b>		
Capital	3,042,035	3,042,035
Capital reserve	594,507	594,507
Profit reserve	878,340	551,685
Additional dividends proposed	57,170	159,325
<b>TOTAL SHAREHOLDERS' EQUITY</b>	<b>4,572,052</b>	<b>4,347,552</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<b>8,616,294</b>	<b>8,054,820</b>

Statement of income as of December 31, 2018 (Amounts expressed in thousands of Reais, except earnings per share)	Consolidated	
	2018	2017
<b>NET OPERATING INCOME</b>	<b>1,077,059</b>	<b>1,391,074</b>
Operating costs		
Personnel	(45,866)	(43,724)
Material	(281,116)	(119,271)
Outsourced services	(27,520)	(26,699)
Depreciation and amortization	(279)	(708)
Other operating costs	(7,575)	(7,375)
	(362,356)	(197,777)
<b>GROSS PROFIT</b>	<b>1,272,881</b>	<b>879,282</b>
General and administrative expenses		
Personnel and Management	(77,686)	(75,437)
Outsourced services	(30,087)	(25,965)
Depreciation and amortization	(6,121)	(3,218)
Other operating expenses	(30,388)	(16,980)
	(144,282)	(121,600)
<b>INCOME (LOSS) BEFORE NET FINANCIAL INCOME (EXPENSES), EQUITY ACCOUNTING, AND TAXES AND CONTRIBUTIONS</b>	<b>1,128,599</b>	<b>757,682</b>
Equity in net income of subsidiaries	301,256	168,578
Financial income	62,913	69,753
Financial expenses	(274,100)	(292,349)
Net financial income (expenses)	(211,187)	(222,596)
Income (loss) before taxes and contributions	1,218,668	703,664
Current income tax and social contribution	(86,611)	(127,554)
Deferred income and social contribution taxes	(60,752)	72,175
income and social contribution taxes	(147,363)	(55,379)
Net income for the year	1,071,305	648,285
Earnings per share		
Earnings per common share - Basic and diluted (in R\$)	1.03658	0.62727
Earnings per preferred share - Basic and diluted (in R\$)	1.03658	0.62727
Income		
Remuneration of concession financial asset	-	576,548
Restatement of financial assets	-	(23,152)
Compensation of concession contract assets	507,547	-
Restatement of contract assets	347,204	-
Operation and maintenance	573,088	554,481
Construction and indemnity	415,403	88,845
Variable portion	(20,264)	(9,028)
Other income	(14,685)	25,900
	1,808,293	1,213,594
<b>Inputs acquired from third-parties (Including tax amounts - ICMS, IPI, PIS AND COFINS)</b>		
Materials, energy, outsourced services and other	(338,723)	(171,935)
General, administrative and other expenses	(36,612)	(22,815)
	(375,335)	(194,750)
Gross added value	1,432,958	1,018,844
Depreciation, amortization and depletion	(6,400)	(3,926)
Net value added produced by the Company	1,426,558	1,014,918

Statement of income as of December 31, 2018 (Amounts expressed in thousands of Reais, except earnings per share)	Consolidated	
	2018	2017
<b>added value received as transfer</b>		
Equity in net income of subsidiaries	301,256	168,578
Financial income	62,913	69,753
	364,169	238,331
<b>Total added value payable</b>	<b>1,790,727</b>	<b>1,253,249</b>
<b>Distribution of personal added value</b>		
Direct remuneration	65,600	63,754
Benefits	34,608	31,662
FGTS	5,521	5,970
	105,729	101,386
<b>Taxes, rates and contributions</b>		
Federal (include Aneel's regulatory fees)	338,652	210,000
State	260	760
Municipal	681	469
	339,593	211,229
<b>Third-party capital remuneration</b>		
Debt charges and inflation adjustment, net	305,899	267,855
Derivative financial instruments	(39,522)	15,773
Other	7,723	8,721
	274,100	292,349
<b>Remuneration of own capital</b>		
Interim dividends paid	525,042	145,175
Interest on own capital paid	275,838	288,428
Legal reserve	53,565	32,414
Tax incentive reserve	48,613	22,943
Special reserve	111,077	-
Additional dividends proposed	57,170	159,325
	1,071,305	648,285
<b>Total added value paid</b>	<b>1,790,727</b>	<b>1,253,249</b>

## DIMENSION

# SOCIAL AND SECTOR

The human resources policy is applied to all the TAESA Group's companies. The development process for employees must be understood as a business strategy and is an integral part of its management model. All investments related to this subject serve a strategic function to ensure, in the present and in the future, availability of the competences required to provide business leadership. By making continuous investments in the growth and development of its employees, TAESA prepares them to create and offer better results for the business.

Furthermore, Human Resources strategies summarize a set of principles, concepts and an action cycle aimed at the development, quality of life and motivation of employees, and, consequently, at the Company's success.

Everybody is entitled, in an ethical and transparent way that respects diversity, to equal opportunities and to the possibility of pursuing a solid career, receiving compensation compatible with that offered on the market and attractive fringe benefits in a motivating and challenging environment.

In addition, TAESA acts as facilitator of the information flow, promoting two-way objective and direct communication, in a respectful and honest manner.

## INTERNAL SOCIAL INDICATORS

POSITION as of 12/31/2018	TAESA
Number of employees	587
Number of own employees	587
Number of outsourced employees	-
	In percentage (%)
Employees with up to 30 years	20%
31-40 years	42%
41-50 years	25%
Over 50 years	12%
Number of women in relation to total	16%
Women in managerial positions in relation to total managerial positions	12%
African-American employees in relation to the total - including browns	4%
Black employees in relation to total - including browns	27%
Disabled employees	2%
	In reais (R\$)
Remuneration (Base salary + Allowance for Health Hazards / Transfer) (2018)	53,690,898.34
Fixed mandatory charges (87.02%)	28,202,661.11
Education	1,246,177.00
Food	5,606,303.15
Transportation	217,068.97
Healthcare	9,745,545.71
Division of the highest remuneration by the lowest paid (Base salary)	61.50
Division of the lowest remuneration by the current minimum wage (Base salary)	1.36
	In percentage (%)
Remuneration up to R\$ 1,300 (Base salary + Allowance for Health Hazards / Transfer)	5%
R\$ 1,301 to 3,000	8%
R\$ 3,001 to 5,000	21%
Over R\$ 5,000	67%
<b>IN R\$ THOUSAND (BASE DECEMBER 2018)</b>	
Average Executive Board salary	75,467.25
Average Management salary	27,658.96
Average Staff salary	8,642.92
Average Field salary	4,235.07
Total number of employees	587
<b>AS A PERCENTAGE OF TOTAL EMPLOYEES</b>	
Elementary School	4%
High School	32%
Higher Education	49%
Post-Graduation	13%
Amount invested in professional development	1,223,013.00
Number of hours invested in professional development per employee (in hours) / trained employees	49
	In numbers
Total number of employees at the end of the period**	587
Number of dismissals during the period	124

\* This line considers only the number of own employees.

**BENEFITS OFFERED BY TAESA:**

- Healthcare
- Dental care
- Life insurance
- Meals / Food
- Private pension
- Transportation voucher
- Christmas - Food
- Profit Sharing
- Daycare nursery grant

**EXTERNAL SOCIAL INDICATORS**

Since the beginning of the **TAESA** Concession Operation and aiming to maintain a harmonious coexistence with the surrounding communities (stakeholders) of the projects, the activities related to the renovation/deployment of barbed-wire fence gates, gates, manholes and improvement of access roads, as well as conducting educational and communication campaigns with the disclosure of the number **0800-701-6682**, direct channel with the Company.

Due to the proximity to these stakeholders, satisfactory results are obtained, since besides avoiding relationship difficulties, this enables the formation of partnerships that reflect the protection of **TAESA**'s facilities and, thus, the safety of infrastructure and degree of reliability of the service provided are significantly preserved.

With this, it is important highlighting that regarding the management of the company's impact on surrounding communities, there were no negative records associated with this issue.

**SOCIAL RESPONSIBILITY PROJECTS**

One of the guidelines of Transmissora Aliança de Energia Elétrica S.A. (**TAESA**) is to optimize, in the best possible manner, the use of resources for Social Responsibility Projects. In this sense, the companies that comprise the Transmissora Aliança Group prioritize the execution of projects governed by sustainability and contributing to the citizenship value, inclusion and social development. The projects currently sponsored by the Company are incentivized through benefits arising from the "Rouanet Law", "Sports Law", "Audiovisual Law", "PRONON" – National Support Program for Oncologic Attention, "PRONAS" – National Support Program for Attention of Disabled Person's Health, "FIA" – Fund for Childhood and Adolescence, and the "Senior Citizen Law".



ROUANET LAW (LAW N° 8,313/91)



Inhotim Institute

**ANNUAL PLAN OF ACTIVITIES AND MAINTENANCE 2018 • INHOTIM INSTITUTE**

The project “Annual Plan of Activities and Maintenance 2018 • Inhotim Institute”, proposes making possible the maintenance and conservation of the artistic and botanical collections of the “Inhotim Institute” and the several multidisciplinary activities aimed at the democratization of access to culture, with emphasis on regional municipalities.



Presentation in Rio de Janeiro

**GRUPO CORPO • TEMPORADA GIRA**

Project “Grupo Corpo Sponsorship• The purpose of Gira Season” was remaking the shows “21” and “GIRA”, in addition to the performance in the city of Rio de Janeiro.



Cinema in the Ouro Preto square •

**13<sup>th</sup> CINEOP • MOSTRA DE CINEMA DE OURO PRETO**

Project “13º CINEOP • Film Festival of Ouro Preto” comprised the exhibition of over 50 Brazilian films, in previews and retrospectives, workshops, debates, seminars, exhibitions, book launch, and artistic attractions.



## “MUSICAL DONA IVONE LARA • UM SORRISO NEGRO”

The “Musical Dona Ivone Lara - Um Sorriso Negro” comprised the staging of the show artistic season, at Teatro Municipal Carlos Gomes, in Rio de Janeiro.



4ª Bienal Brasil do Livro e da Leitura

## BIENAL BRASIL DO LIVRO E DA LEITURA

The Project “4<sup>th</sup> Book and Reading Fair” consisted in holding the 4<sup>th</sup> Book and Reading Fair”, from August 18 to 26, 2018, in Brasília – Federal District -DF, with free entrance, providing an opportunity of access to the best literature produced in Brazil and abroad.

## SPORTS LAW (Law 11438/06)



Children taking part in rojeto Massificação do tennis project

## PROJECT: MASSIFICATION OF TENNIS INSTITUTE

The project “Massification of Tennis Institute” aimed at the realization of tennis lessons in municipal and state public schools for children aged 6 to 10 years with the provision of all methodology and materials suitable for the practice of this sport.

## YEAR VII • COMPETITIONS TENNIS INSTITUTE COMPETITION TEAM

Project “Year VII • The purpose of Competitions Tennis Institute Competition Team of Tennis Institute” was to hold competitions for the teams of players to the Tennis Institute, funding the participation of its athletes in the main global competitions. The target audience are athletes from the Tennis Institute from 12 to 20 years old.





### **PROJECT: ANTHROPOCENE • THE AGE OF MAN**

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“Anthropocene Project • The purpose of “The Age of Man” is to film a documentary that will address the establishment of an energy transmission global network in 2054. The film, for cinema and TV, combines reality and fiction in two temporal axes: 2020 and 2054.

### **PRONON • NATIONAL PROGRAM OF ONCOLOGICAL ATTENTION (PRONON) (Law Nº 12,715/12)**

#### **ACQUISITION OF EQUIPMENT AND EXPANSION OF DIAGNOSTIC OFFER IN ONCOLOGY**

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The project “Acquisition of equipment and expansion of offer of oncology diagnostic” of Hospital Bom Samaritano is designated for the purchase of a magnetic resonance device to permit immediate accessibility to the Magnetic Resonance Imaging test for the oncologic patient of Governador Valadares and for the cities of the East region of the State of Minas Gerais - MG.

#### **PALLIATIVE CARE, HUMANIZED CARE - ASSOCIAÇÃO MARIO PENNA**

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The purpose of the Project “Palliative Care, Humanized Care” is to structure a palliative care sector in Hospital Mário Penna, which will permit the creation of day care to the patient, in palliative care, by offering medical, social assistance, physiotherapy and psychology services. An hospitalization space will be structured with 12 beds by making available human resources, hospital material and medicines, meals, sanitization and purchase of equipment that will promote a full and humanized assistance to the patient and companions.

## PRONAS • NATION SUPPORT PROGRAM FOR ATTENTION OF THE DISABLED PERSON'S HEALTH (LAW 12.715/12)

### **PROJECT: TECHNOLOGICAL INNOVATION IN FAVOR OF DISABLED PEOPLE FROM APAE OF JANAÚBA**

The purpose of the Project "Technological Innovation in Favor of Disabled Persons from APAE in Janaúba" is to improve the rehabilitation/habilitation process of disabled persons served in the institution, proving access to new treatment techniques.

## FIA • CHILDHOOD AND ADOLESCENCE FUND (LAW 8.069/90)

### **SEEDING THE FUTURE WITH ART AND CITIZENSHIP**

The Project "Sowing the Future with Art and Citizenship" of Futuro Brasil Foundation offers support, mainly for needy children and adolescents facing social risk and their family members, regarding educational guidance, educational recreation, sports and leisure, pediatric day care assistance, guidance about family planning and life, sexually transmitted diseases, in addition to identifying and improving the potentialities of these children.

### **TRAMPOLIM**

The proposal of the Project "Trampolim" was to perform actions for inclusion of the teenager in the labor market, prioritizing care for those in situation of social vulnerability and/or that are away from the regular labor market. This also promotes actions to strengthen the access of teenagers and youth to the Learning Program, according to the law in force.

## SENIOR CITIZEN LAW • (LAW 21.114/14)

### **STATE FUND FOR THE ELDERLY'S RIGHTS • MG**

In 2018, TAESA designated to the "State Senior Citizens Fund MG" tax incentives related to the Senior Citizen Law.

#### **TOTAL AMOUNT INVESTED IN SOCIAL RESPONSIBILITY**

2017 • R\$4,590,000.00

2018 • R\$5,328,965.00

## ELECTRIC SECTOR INDICATORS

### Research and development

Pursuant to Law Nº 9,991, companies in the electricity sector must invest at least 0.4% of their Net Operating Income in Research and Development (R&D) for “transmission” service concessions.

Regarding the instructions for direct investment in R&D projects (0.4%), the Company maintains the allocation of these amounts in compliance with the provisions of the regulation in force.

TAESA's R&D projects are aimed at developing new alternatives for the electric energy transmission sector, as well as at constantly seeking research projects that contribute to the sustainability, environment, economy, reasonability and, mainly, that generate good results and benefits for the Brazilian society, fostering the competitiveness of the country's industry. The results of these projects contribute to maintaining the Company in the technological forefront in the national electricity sector.

Find below the schedule of amounts referring to R&D investments for the year.

DESCRIPTION	YEAR 2018
Amount of net operating income	1,635,237,950.54
Investment right in R&D	6,102,473
Invested in R&D <sub>2</sub>	7,734,483

<sup>2</sup>Note: And the differences between the right to invest in R&D and the amount actually invested are derived from the amounts actually invested in R&D projects versus the amount available for investment.

<sup>1</sup>Law No. 9.991, of July 24, 2000, amended by Laws No. 10.438, of April 26, 2002, No. 10.848, of March 15, 2004, No. 11.465, of March 28, 2007, No. 12.111, of December 09, 2009, and No. 12.212, of January 20, 2010.



## PROJECTS IN PROGRESS IN 2018

### 0038 • FATIGUE OF CABLES • ANEEL Code PD-5012-0001/2013

Full Title	<b>Fatigue of AC, ACSR and AAAC Conductor Cables</b> - comparative evaluation in terms of the H/W parameter and calculation of residual life.			
Expected result	Develop a Methodology to evaluate the use of the H/w ratio in the design to avoid the wind fatigue of energy conductive cables of pure aluminum (CA), of aluminum with steel core (CAA) and of aluminum alloy (CAL).			
Company / Concession	TAESA / ATE II	TAESA -PATESA	ATE III	Brasnorte
Amount Realized in the Year (R\$)	R\$ 2,120,938.08	R\$ 222,314.40	R\$ 1,131,847.24	R\$ 421,539.66
Project total budget	R\$ 3,896,639.38			
Schedule advance	December 2017: 93%		December 2018: 100%	

### 0039 • TAESA LABORATORY • ANEEL Code PD-2609-0002/2014

Full Title	Research and Development of a System for Fluorescence Detection of Compounds Dibenzylsulphide, DBDS and Others Present in Insulating Oils and Systems for the Removal thereof Via Active Filters.			
Expected result	Develop research lines for the detection and removal of dibenzylsulphide (DBDS), Acetylene and other chemical compounds usually present in insulating mineral oils.			
Company / Concession	TAESA / ATE	TAESA / ATE II	TAESA / GTESA	TAESA / NOVATRANS
Amount realized in the Year (R\$)	R\$ 1,273,431.45	R\$ 321,317.38	R\$ 48,714.42	R\$ 2,274,650.00
Company / Concession	TAESA / PAT	TAESA / STE	TAESA / TSN	ETAU
Amount realized in the Year (R\$)	R\$ 566,840.92	R\$ 299,076.66	R\$ 1,724,476.75	R\$ 85,987.78
Project total budget	R\$ 6,594,495.36			
Schedule advance	December 2017: 96%		December 2018: 100%	

### 0040 • ERGONOMICS • ANEEL Code PD-2609-0003/2014

Full Title	Computational inference methodology aimed at improving the identification, prevention and treatment of ergonomic diseases and occupational accidents.			
Expected result	Software development for computational inference with application of Fuzzy logic for treatment of data obtained in the field through psychosocial study.			
Company / Concession	ATE III	TAESA / NOVATRANS	TAESA / NTE	
Amount Realized in the Year (R\$)		R\$ 1,349,160.00	R\$ 675,822.39	R\$ 161,218.58
Company / Concession	TAESA / ETEO	ETAU		
Amount Realized in the Year (R\$)		R\$ 327,400.00	R\$ 72,099.00	
Project total budget	R\$ 2,585,699.97			
Schedule advance	December 2017: 85%		December 2018: 100%	

### 0042 • ANALYSIS OF IMAGES • ANEEL Code PD-02609-0042/2016

Full Title	Intelligent computational application of automatic image acquisition and treatment for monitoring switchgear maneuvering, inspection and fault diagnosis in equipment.			
Expected result	Use this feature to ensure successful operation of switch disconnectors, allowing their status to be confirmed after a telecontrol operation. Moreover, the use of thermal imaging will enable the preventive identification of failures in supervised equipment. This development of artificial intelligence is currently a technology not available in the electrical sector, aiming to automatize the analyzes.			
Company / Concession	TAESA / NOVATRANS			
Amount Realized in the Year (R\$)	R\$ 4,883,207.13			
Project total budget	R\$ 5,814,486.00			
Schedule advance	December 2017: 55%		December 2018: 78%	

**0044 • RIGHT OF WAY PROJECT • ANEEL Code PD-2607-0044/2016**

Full Title	Study of actions to mitigate the risks of transmission line shutdown due to fire and evaluation of methods for the maintenance of easement areas.	
Expected result	The research provides for the creation of an indicator of criticality in the LTs stretch, through the correlation of the growth cycle of forest species and the response in different sensors, and to build modeling for the analysis of these parameters and other physical, biotic and socioeconomic means.	
Company / Concession	TAESA / TSN	
Amount realized in the Year (R\$)	R\$ 4,372,829.06	
Project total budget	R\$ 6,051,305.97	
Schedule advance	December 2017: 55%	December 2018: 86%

**0045 • INSPECTION OF TIE RODS • ANEEL Code PD-5012-0045/2016**

Full Title	Diagnosis and Development of Predictive and Non-Destructive Inspection Methodology of Corrosion on Electricity Transmission Tower Guy Lines – Case Study: LT 230 kV Paraíso – Açú.	
Expected result	The main product of the project, the methodology for the diagnosis of corrosion by means of the combination and correlation of electrochemical techniques and impulse reflectometry, will be applicable to the entire electric sector, within the scope of the power transmission lines, for the evaluation of the tie rods of towers, as well as for foundations and external metallic systems.	
Company / Concession	TAESA / ATE	TAESA / ATE II
Amount Realized in the Year (R\$)	R\$ 2,454,596.60 2,208,287.95	
Project total budget	R\$ 5,864,464.30	
Schedule advance	December 2017: 55%	December 2018: 86%

**0046 • EQUIPMENT MONITORING • ANEEL Code PD-05012-0046/2017**

Full Title	Development of multi-criteria methodologies to create a hierarchy scale of Transformers and Reactors, for online monitoring, supported by experimental software.	
Expected result	Experimental software with functionalities that will automatically obtain the transformer and reactor status indices and the hierarchy scale of this set of equipment as employees provide up-to-date asset data to the software.	
Company / Concession	TAESA / ATE II	
amount realized in the Year (R\$)	R\$ 3,194,927.15	
Project total budget	R\$ 3,566,334.00	
Schedule advance	December 2017: 5%	December 2018: 59%

**0049 • AUTOMATED OPERATIONAL CLIMATOLOGY • ANEEL Code PD-00414-0049/2017**

Full Title	Tool for predicting the risk of occurrence of weather-related phenomena and optimized allocation of resources for emergency maintenance of networks	
expected result	System that will permit the forecast of fires and lightings aiming at guiding those responsible for the operation and maintenance of the transmission network, through information arising from GIS systems and INPE specialized systems that monitor meteorological events.	
Company / Concession	TAESA / ETEO	
Amount realized in the Year (r\$)	R\$ 1,139,729.37	
Project total budget	R\$ 3,835,776.00	
Schedule advance	December 2017: 4%	December 2018: 50%

**0052 • LANDFILL CONTROL • ANEEL Code PD-04906-0052/2017**

Full Title	Control of temporary landfills: Applied IoT Technology for the Elimination of Improper Shutdown due to the Permanence of Temporary Landfill	
expected result	Electronic system for the control and monitoring of the installation and removal of temporary ground cables in LTs, LDs and SEs via a local monitoring system and another remote system in the COC, to ensure that no reconnection maneuver be performed without the total withdrawal of the AT.	
Company / Concession	TAESA / ATE	
amount realized in the Year (R\$)	R\$ 1,592,439.91	
Project total budget	R\$ 2,144,113.00	
Schedule advance	December 2017: 15%	December 2018: 75%

**0053 • TELEPROTECTION IN IEC-61850 • ANEEL Code PD-07130-0053/2018**

Full Title	Teleprotection in IEC-61850	
expected result	Develop a high-performance communication solution between the communication network substations in case of failure, low latency and security from a low-cost SDN (Software-Defined Networking) controller.	
Company / Concession	TAESA / NTE	
amount realized in the Year (R\$)	R\$ 564,060.00	
Project total budget	R\$ 5,752,555.00	
Schedule advance	December 2017: -	December 2018: 10%

**0039 • TAESA LABORATORY • ANEEL Code PD-2609-0002/2014**

Full Title	Research and Development of a System for Fluorescence Detection of Compounds Dibenzylsulphide, DBDS and Others Present in Insulating Oils and Systems for the Removal thereof Via Active Filters.				
expected result	Develop research lines for the detection and removal of dibenzylsulphide (DBDS), Acetylene and other chemical compounds usually present in insulating mineral oils.				
Company / Concession	TAESA / TSN	TAESA / MUNIRAH	TAESA / GTESA	TAESA / NOVATRANS	TAESA / ETEO
amount realized in the Year (R\$)	R\$ 143,519.36	R\$ 510.37	R\$ 730.00	R\$ 220,885.79	R\$ 49,000.00
Company / Concession	TAESA / STE	TAESA / ATE	TAESA / ATE II	TAESA / ATE II	ETAU
amount realized in the Year (R\$)	R\$ 13,806.00	R\$ 39,672.59	R\$ 9,594.84	R\$ 6,141.17	R\$ 321.49
Project total budget	R\$ 863,695.00				
Schedule advance	December 2017: 37%		December 2018: 87%		

**REGULATORY PAYMENTS**

Still in compliance with Law No. 9.9913, the companies in the electric energy sector eligible pursuant to the law should allocate 0.4% of their Net Operating Income ("NOR") to the National Development, Scientific and Technological Funding ("FNDCT") and 0.2% of its NOR to the Ministry of Mines and Energy ("MME").

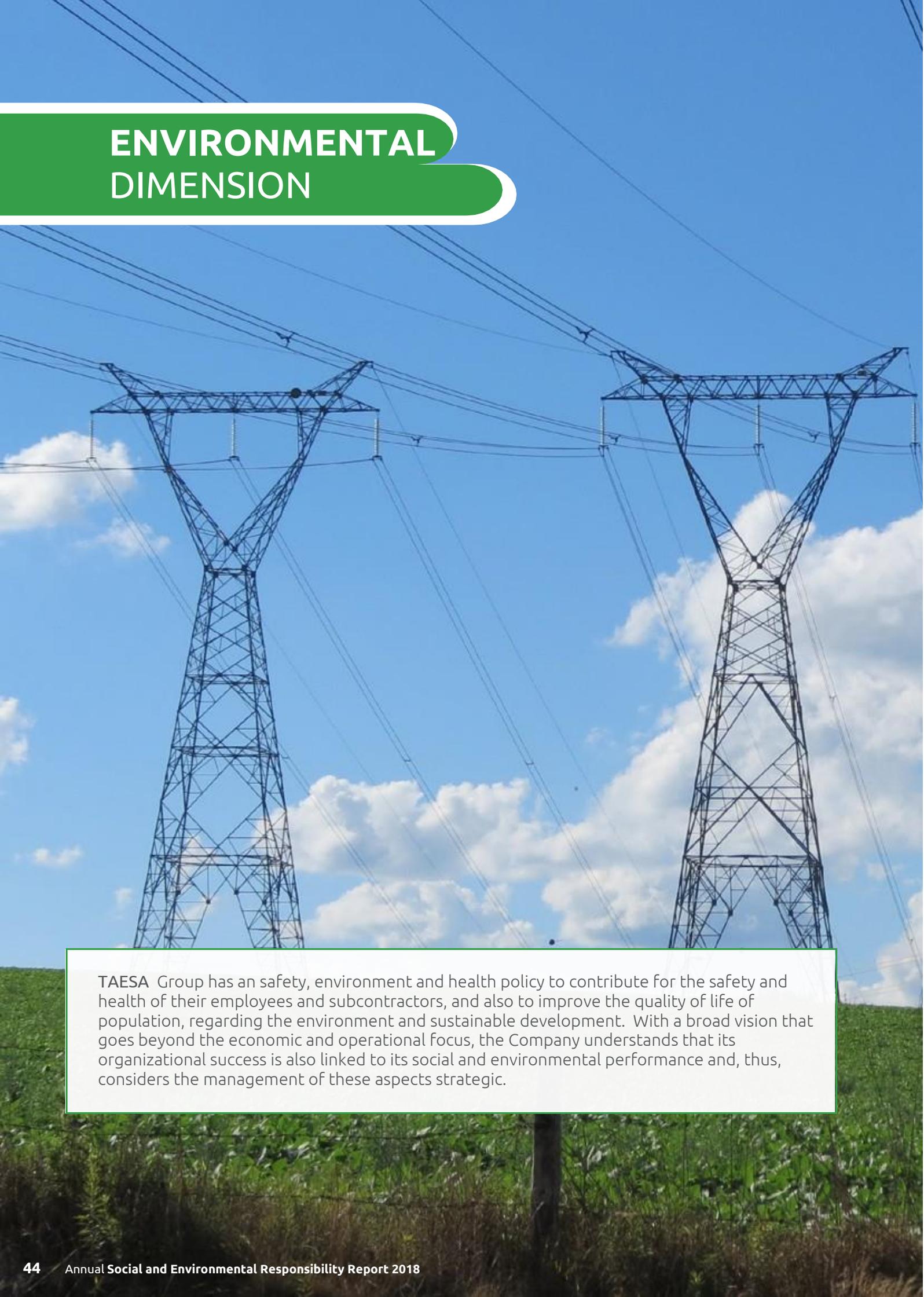
Regarding these payment and investment determinations, TAESA confirms that if made investments with the FNDCT and MME in compliance with the provisions of the regulation in force.

Find below the schedule of amounts referring to payments in the year.

DESCRIPTION	YEAR 2018
Amount of net operating income	1,635,237,950.54
Obligation payable to FNDCT	6,374,154.65
Amount paid to FNDCT	6,374,320.77
Obligation payable to MME	3,269,218.05
Amount paid to MME	3,269,301.11

Note: The differences between the amount payable to FNDCT and MME and the amounts actually collected are due to the maturity period (generally 40 days). And the differences between the right to invest in R&D and the amount actually invested are derived from the amounts actually invested in R&D projects versus the accumulated amount available for investment.

<sup>3</sup>Law No. 9.991, of July 24, 2000, amended by Laws No. 10.438, of April 26, 2002, No. 10.848, of March 15, 2004, No. 11.465, of March 28, 2007, No. 12.111, of December 9, 2009, and No. 12.212, of January 20, 2010.



## ENVIRONMENTAL DIMENSION

TAESA Group has an safety, environment and health policy to contribute for the safety and health of their employees and subcontractors, and also to improve the quality of life of population, regarding the environment and sustainable development. With a broad vision that goes beyond the economic and operational focus, the Company understands that its organizational success is also linked to its social and environmental performance and, thus, considers the management of these aspects strategic.

## ENVIRONMENTAL MANAGEMENT SYSTEM

The Environmental Management System (EMS), whose purpose is the continuous improvement of the effectiveness and efficiency of its services and environmental performance, must provide solutions to minimize its environmental needs through planning, allocation of resources, assignment of responsibilities and evaluation of the practices, procedures and processes adopted, on an ongoing basis. The EMS is an uninterrupted, participative, and transversal process that reaches several areas of the company.

TAESA has been constantly improving its policies, processes, manual and instructions, aiming at establishing its Environmental Management System, which will be applicable to its subsidiaries, based on ABNT Standards NBR ISO 14001:2004 e ABNT NBR ISO 14031:2004 – internationally respected and recognized standards.

### DESCRIPTION

The focus of the EMS is to firstly ensure that all legal requirements related to the performance of the Company's operations are met, and subsequently that they are improved. TAESA's security, environmental and health policy is not restricted to strict compliance with the laws and contracts it holds, constantly seeking to set its own goals, preventive for the performance (sometimes not addressed by legal and contractual requirements). It also aims to voluntarily follow important international documents of environmental protection.

The EMS is comprised of the Policy, the Management Manual, and the theme-related Programs. Such documents establish the objectives and targets to be reached, risks and impacts, action plans, criteria, performance indicators, management, evaluation, monitoring and review processes. The Environmental Management System is applied throughout the Company and can be extended to the entire TAESA group, all its employees, outsourced employees and partners exposed to its guidelines, improving the performance of its tasks.

The Management of the social and environmental performance of TAESA GROUP is directly linked to the General Executive Board.

Among the duties of the system is the systematic evaluation of the EMS that occurs at regular intervals, at which time the following items are checked: adequacy, pertinence, effectiveness and efficiency of its actions.

The review is an inherent process to the EMS and is based on the evaluations from the monitoring of the activities carried out, as well as on situations differentiated during the year, such as incidents or changes in the legislation. Thus, the processes are reviewed and, where appropriate, adjusted to achieve the goals and targets set forth in the EMS.

All the formatting and review of the EMS are developed in a participatory, constructive manner, calling the stakeholders to participate, so that their current and future demands and expectations are considered and displayed in the process of establishing the goals and objectives of the EMS Programs.

The EMS also has processes to identify and monitor the needs and expectations of stakeholders regarding the Company. Such processes include people within the organization, neighbors of the right of way, owners, investors and potential investors, regulators, suppliers and service providers, as well as the society in general.

TAESA, in the preparation of its processes focused on SGA, aims at the quality of the relationship with its employees, outsourced collaborators and partners. To this end, the Company established behavioral guidelines to continually improve the organizational climate, thus contributing to increased satisfaction and individual performance, based on environmental, social, operational and economic aspects.

Moreover, the Company seeks to improve the work environment, improving the physical conditions of the space shared by employees. It also seeks to encourage opportunities that provide greater participation and engagement of teams, including decision-making decision-making processes; provide

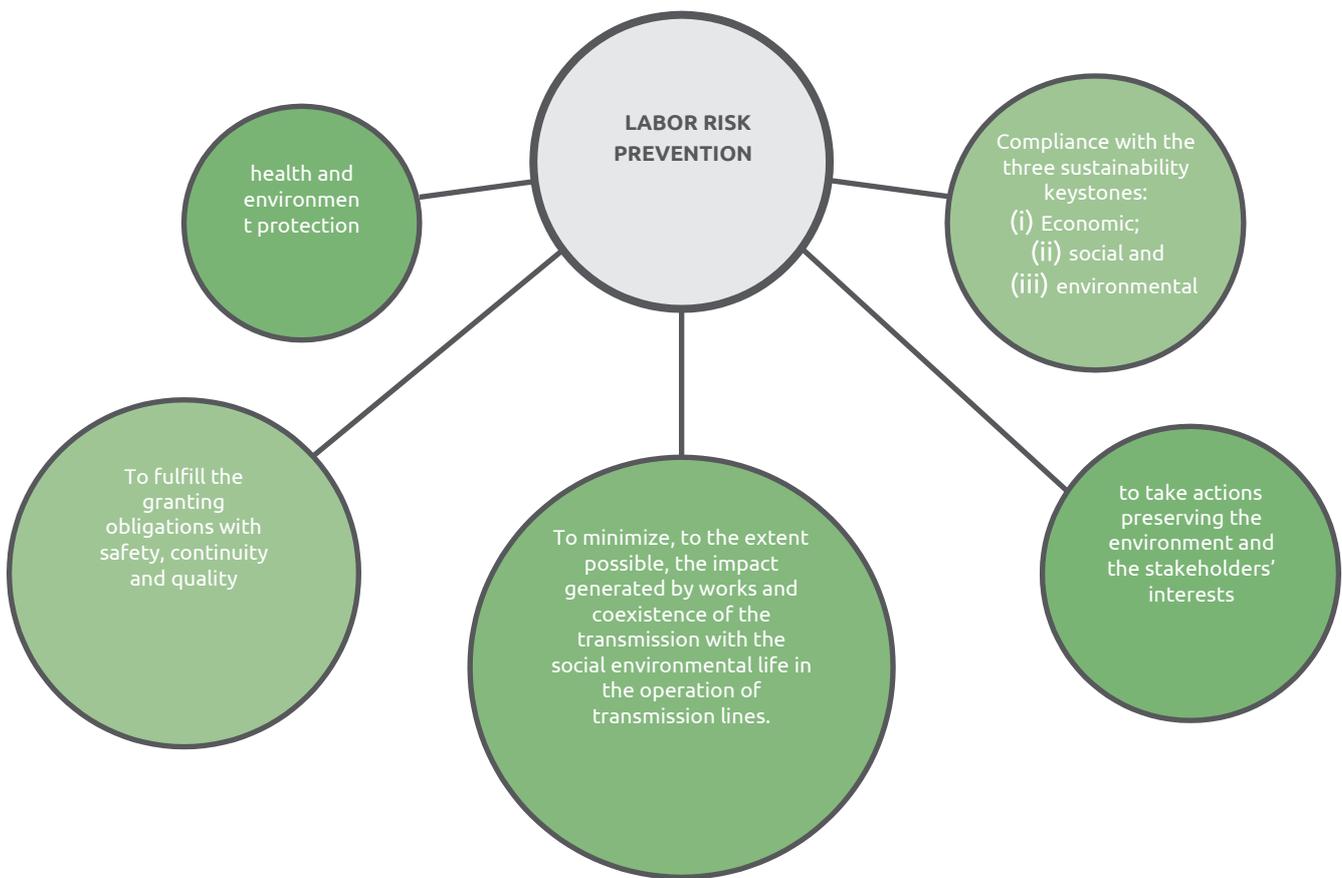
ongoing training and career planning; recognizing and rewarding its employees.

Regarding suppliers and partners, in addition to providing the best working conditions, the Company is constantly seeking to be close and interact with the parties. The Company offers technical cooperation to validate the capacity and safety of its processes, motivating its suppliers and service providers to deploy programs and actions for continuous improvement of environmental performance, and periodically verifying the conformity of their processes, based on the contractual requirements assumed.

**SAFETY, ENVIRONMENT AND HEALTH POLICY (“SEH”)**

SMS Policy will be the core EMS document, from which all managerial and operational actions related to the social and environmental aspects of the business are derived.

Among the main commitments are:



The Environmental and Social Programs of TAESA adopt guidelines, plans, actions and strategies in compliance with the Police commitments, which permit their accomplishment, thus assuring the reach of the Company’s environmental performance. We point out that the Programs also consider the following assumptions:

- **minimum performance** • are those of compulsory nature or that may generate high risk situations; and
- **performance** • continuous improvement – related to meeting the expectations of stakeholders.

The programs exist to ensure that the environmental criteria pertinent to all phases of the work of the TAESA GROUP, from the construction to the operation and maintenance of the Transmission Lines, are met. Such criteria are identified in the pertinent environmental legislation, permits and authorization on Company’s behalf, in the technical specifications for conducting the works, and in other normative documents related to the works of the concessionaires.

Thus, the Social and Environmental Programs contain a huge diversity of actions and items to be controlled and monitored. All of its phases are described in detail.

In general, the Programs should have, when necessary, the following items:

- Name and presentation of what the Program is;
- Objective;
- Goals to be verified, and their quantitative amounts, when applicable;
- Possible support or transverse programs;
- Timetable;
- Methodology;
- Authority/Responsibility Matrix;
- Performance indicators;
- Associated documents;
- History; and
- Target audience.

It is also important to mention the obligation in the environmental dimension the Environmental Compensation of public service concessions, established by Federal Law No. 9,985 /2000 and regulated by Decree No. 4,340/2002 and, therefore, it constitutes a legal obligation for all projects that cause significant environmental impact.

The entrepreneurs are obliged to support the implementation and maintenance of the Conservation Unit through the investment of corresponding funds in up to 0.5% (modified by Federal Decree No. 6,848/2009) of the total costs foreseen for the implementation of the project. All TAESA Group's concessions under this obligation had their investment percentages evaluated and approved by the Environmental Bodies.

It is worth highlighting that before the enactment of Federal Decree No. 6,848/2009, there was no legal rule providing for the percentage limit for investment in the Environmental Compensation.

The status of contracts/terms related to the performance of actions and determinations related to Environmental Compensation projects can be checked below, based on the schedules established by the Environmental Bodies and attached to the main contracts.

#### SOUTHEAST/NORTHEAST TRANSMISSION LINE

Regarding Environmental Compensation, the Statement of Commitment dated March 4, 2005 was entered into with IBAMA, providing for the investment to be made by TAESA (TSN) in the total amount of R\$ 6,305,888.76, to be invested in the following locations:

- Federal Units (Parque Nacional da Chapada Diamantina);
- State Units (APA of Pouso Alto); and
- Municipal Units (Parque Municipal do Lavapés in the Municipality of Cavalcante).

Regarding Federal Units, pursuant to the provisions of the Statement of Commitment for the Investment of Environmental Compensation Funds, entered into between TAESA (Concession 097/2000) and Instituto Chico Mendes de Conservação da Biodiversidade (ICMBIO) as of April 28, 2010, the parties reported that all the installments described in the aforementioned agreement, totaling R\$ 5,681,000.00, were invested in the Parque Nacional Chapada da Diamantina - BA. On December 23, 2010, ICMBio issued the Record of Full Settlement of the amount agreed between TAESA (Concession 097/2000) and the Institute.

Regarding the State Units, for the full settlement of Environmental Compensation obligations in relation to Concession No. 097/2000, the amount determined was R\$ 125,000.00. In 2014, 98% of the investments were duly invested in the Secretaria do Meio Ambiente e Recursos Hídricos (SEMARH) of Goiás, according to ICMBio's determination. The remaining investment is scheduled for the year 2019 (pending definition of the investment of the balance by the Licensor), when the Concession will request the issuance of the Full Settlement Term for the States.

Regarding the Municipal Units, the Environmental Compensation commitment is practically settled, since almost 99% of the determined investments have already been used. The remaining investment is scheduled for the year 2019 (pending definition of the investment of the balance by the Licensor), when the Concession will request the issuance of the Full Settlement Term for the Municipal Units.

#### **CAMAÇARI II TRANSMISSION LINE – SAPEAÇU**

**TAESA** signed a Statement of Commitment with Secretaria Estadual do Meio Ambiente da Bahia (SEMA/BA), a state environmental agency of Bahia, on December 05, 2012, through which the amount of R\$ 280,201.25 was established. The investment for the process was fully used and the issuance of the Settlement Statement occurred in December 2017.

#### **SANTA CRUZ TRANSMISSION LINE - PARAÍSO AÇÚ II**

The IDEMA – Institute of Sustainable Development and Environment, state body of Rio Grande do Norte, approved the amount of one hundred, seventy seven thousand, seven hundred and seven reais and thirty five cents (R\$177,707.35), which corresponded to 0.73% of the development amount, to be invested in the state Conservation Unit.

The aforementioned fund was fully invested in favor of IDEMA's Management and Conservation Units Center.

The environmental compensation referring to the LT Sta Cruz – Paraíso Açu section was duly settled with the Environmental Body on July 19, 2004.

#### **GOIANINHA - MUSSURÉ II TRANSMISSION LINE;**

IBAMA approved the amount of one hundred and five thousand, eight hundred and fifty reais (R\$105,850.00), 0.73% of the investment amount, to be invested in the Conservation Unit described below.

- Fernando de Noronha Marine National Park - Pernambuco

Similarly to the LT Sta Cruz – Paraíso Açu section, noteworthy is the environmental compensation of LT Goianinha – Mussuré II section, which was duly settled with the environmental body in August 2006.

#### **NORTE SUL II TRANSMISSION LINE**

**TAESA** complied with 100% of the Environmental Compensation obligations, the application of which, in Conservation Units in the states crossed by the LT Norte-Sul II, totaled R\$ 6,042,000.00. **TAESA** is waiting the definition of the application, by the Body, so that it can fully comply with this condition.

Units benefiting from **TAESA's** Environmental Compensation (Novatrans) funds:

- Reserva Biológica de Gurupi – Maranhão
- Estação Ecológica Serra Geral do Tocantins – Tocantins
- Nascentes do Rio Parnaíba National Park – Piauí/Maranhão/Tocantins/Bahia
- Parque Nacional da Chapada dos Veadeiros – Goiás
- Descoberto Environmental Protection Area – Federal District
- Parque Nacional do Itatiaia – Rio de Janeiro

The Settlement Instrument was issued by Instituto Chico Mendes de Conservação e Biodiversidade ("ICMbio") in May 2018.

In relation to Fundação Nacional do Índio (FUNAI), the amount of R\$ 1,200,000.00 was approved for investment, as Environmental Compensation, to benefit the Avá Canoeiro Indigenous Community, considering that the project interfered in the area of this Community. Compliance with the obligations is expected to be finalized in 2019.

#### **ASSIS - SUMARÉ TRANSMISSION LINE**

- Environmental and Experimental Unit of Assis - São Paulo

The compensation was carried out by recovering an areas of 68.44 ha., with sowing of 116,348 seedlings of trees of native species in the Experimental and Ecological Station of Assis, linked to the

São Paulo Forestry Institute. ETEO settled all its commitments related to environmental compensation in January 2005.

#### **COLINAS – MARABÁ & CARAJÁS – ITACAIÚNAS TRANSMISSION LINE**

The Environmental Compensation related to Operating Permit No. 5123/2010, issued by the Secretaria do Meio Ambiente do Estado do Pará (SEMA/PA), was fully invested by ATE III in the amount of R\$ 1,261,793.00. It is expected that the settlement statement will be issued in the year 2019.

#### **TRANSMISSION LINE ITACAIÚNAS – COLINAS**

Regarding the Environmental Compensation related to Operating Permit nº 753/2008, IBAMA defined the management units for the effective realization of the investment. Therefore, this obligation is in the compliance phase. The obligations are expected to be settled by the year 2019.

#### **TRANSMISSION LINE LONDRINA – ARARAQUARA**

The ATE concluded 90% of its obligation regarding the Environmental Compensation for the total of R\$ 1,849,446.95 until December 2014. The completion of the investment and the consequent request for the issuance of the Full Settlement Statement by the corresponding body is expected for 2019.

#### **TRANSMISSION LINE COLINAS – SOBRADINHO**

On July 9, 2008, ATE II settled the Environmental Compensation by Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio) in the total amount of R\$ 2,420,535.00.

In 2012, ATE II invested R\$ 400,000 at Parque Estadual do Mirador, in the State of Maranhão.

Thus, the allocation of the total amount of R\$ 2,820,535.00, to be allocated in the Environmental Compensation regarding the project, was duly complied with, and only waits the issuance of the formal settlement statement scheduled for the year 2019.

#### **XINGÓ - ANGELIM II TRANSMISSION LINE**

ICMBio – Instituto Chico Mendes de Conservação da Biodiversidade approved the amount of five hundred and seventy-seven thousand, one hundred and seventy nine reais (R\$577,179.00) for investment in Pedra Talhada Biological Reserve.

The disbursement was made by NTE with Caixa Econômica Federal, in the amount mentioned above, through an identified deposit in an Environmental Compensation Account in compliance with the Instrument of Commitment entered into with ICMBio.

Therefore, the environmental compensation related to LT Xingó – Angelim II was duly settled with the Environmental Body. The Full Settlement Instrument was issued by ICMBio in January 2011.

#### **ANGELIM - CAMPINA GRANDE II TRANSMISSION LINE**

Similarly to the LT Xingó – Angelim II section, noteworthy is that the environmental compensation of the LT Angelim – Campina Grande I section was also duly settled with the Environmental Body. The Full Settlement Instrument was issued by ICMBio on April 28, 2010.

The disbursement made with ICMBio, totaled the amount of two hundred and ninety three, nine hundred and fifty reais and fifty two cents (R\$ 293,950.52), which were invested in the Biological Reserve of Saltinho, in compliance with the Instruments of Commitments entered into.

#### **URUGUAIANA TRANSMISSION LINE – SANTA ROSA**

The STE is in the investment phase of the Work Plan by Fundação Estadual de Proteção Ambiental (FEPAM) regarding the Statement of Commitment for the Environmental Compensation. Thus, it is estimated that the investment of R\$ 181,046.13 will be completed by the year 2019.

## ENVIRONMENTAL PROGRAMS

The programs developed by TAESA are as follows:

### WASTE MANAGEMENT PROGRAM • PGR

The waste produced in the offices of the LTs and SEs is mostly Class II B - Intert, and is collected by the City Halls. The purpose of the Waste Management Program is to establish guidelines for the management of solid waste resulting from the Company's operations (collection, handling and packaging, temporary storage, transportation, treatment and final disposal). Such program is aimed at both direct employees and service providers.

**Among the specific objectives, we highlight the following:**

- Compliance with the requirements of current legislation;
- Elimination/minimization of environmental risks, prevention of pollution, preservation of natural resources and meeting the needs and expectations of stakeholders.

### PROGRAM FOR MAINTENANCE OF ACCESS ROUTES AND RIGHT OF WAY

The Program for Maintenance of Access Routes and Right of Way aims at the preventive verification and identification of environmental non-conformities in the areas located in the access roads, in the towers' region and in the right of way.

Moreover, the adoption, execution, supervision, monitoring and approval of related corrective actions shall be carried out. It is also necessary to recover all areas that have undergone some type of change in their characteristics, so that the site of interference returns to a condition close to the one existing before the interventions are performed.

**In this sense, the Program foresees conservation actions, whose goals are as follows:**

- Topographic recomposition; and
- The gardening and landscape restoration of the identified areas.

**The focus of the main actions adopted is as follows:**

- In soil preparation; and
- In the restoration of vegetation.

**Regarding the gardening and landscape restoration, the following requirements must be met:**

- Use of native species of the region;
- Adoption of planting models based on ecological succession;
- Use of shrub and herbaceous species (preferably leguminous plants) of annual cycle for immediate soil cover; and
- Use of fast growing tree species to recover the area as soon as possible.

**The expected results of these actions should be as follows:**

- Soil stability;
- Conditions for traffic of personnel and equipment for maintenance of the Transmission Line;
- Stabilization of erosive processes;
- Landscaping similar to the surrounding area;
- Efficient surface drainage systems.

Program for Maintenance of Access Routes and Right of Way is carried out in four different phases: **(a) planning; (b) deployment; (c) monitoring and (d) maintenance.**

We describe below the main actions taken during the Deployment and Maintenance phases.

DEPLOYMENT	
<ul style="list-style-type: none"> <li>• Topographic recomposition;</li> <li>• Improvement of slopes and land recovery;                             <ul style="list-style-type: none"> <li>• Adequacy of surface drainage;</li> </ul> </li> <li>• Protection of slopes and berms;                             <ul style="list-style-type: none"> <li>• Georeinforcing Screens;</li> </ul> </li> <li>• Biodegradable Vegetable Blankets/Screens;</li> </ul>	<ul style="list-style-type: none"> <li>• Bermalongas;</li> <li>• Pillows;</li> <li>• Reforestation;</li> <li>• Soil preparation; and</li> <li>• Selection of species.</li> </ul>
MAINTENANCE OF PLANTING	
<ul style="list-style-type: none"> <li>• Fencing of the area;                             <ul style="list-style-type: none"> <li>• Irrigation;</li> </ul> </li> <li>• Phytosanitary control;</li> </ul> <p><b>Georeinforcing Screens:</b> Consists of flexible vegetable mesh of fibrous plant materials, resistant and interlaced, tied with steel wires to ensure its stability. This material provides mechanical reinforcement to the soil until the development of the vegetation system. It consists of fully biodegradable products.</p>	<ul style="list-style-type: none"> <li>• Cutting and Crowning;</li> <li>• Replacement of seedlings; and</li> <li>• Covering fertilizer.</li> </ul> <p><b>Biodegradable Vegetable Blankets/Screens;</b> Organic biotextile structures composed of chopped fibrous materials (blankets) or whole materials (screens), interwoven with one another by a mesh of resistant or biodegradable vegetable textile yarns (screens).</p>



Photos 01 and 02 • Aerial view of the tower before and after maintenance • TL CO-MC 2 - NVT



Photos 03 and 04 • Aerial view of the tower before and after maintenance • TL

**DEGRADED  
AREA  
RESTORATION  
PROGRAM •  
PRAD**

Degraded Area Restoration Program • PRAD aims to carry out corrective actions associated to the non-conformities identified during the survey process.

**Highlights of performance indicators**

- Total recovered area, by type of vegetation introduced (grasses, fodder legumes and native tree species in heterogeneous plantations);
- Total area re-vegetated, by regions and by construction site;
- Number of interventions adopted, by type of intervention (drainage diversion channels, protective walls, energy dissipation boxes, georeinforced screens, blankets and biodegradable screens, *bermalongas* and cushions); and
- Number of emergency interventions adopted.

The recovery of degraded area can be accomplished by deploying surface drainage, energy dissipation elements and re-vegetation with species of the region itself.

The financial funds invested in this program are included in maintenance costs of the Companies facilities.



Photos 4-9: Recovery of erosion carried out in tower 710 of section COL-RGV – LT 500 kV ATEII LO 579/2006 (ATE II)

**SELECTIVE VEGETATION CUTTING AND PRUNING PROGRAM**

It proposes activities of vegetation cutting and pruning, aiming to guarantee the safe operation of the transmission line, in agreement with the current legislation.





Photos 5-10: View of Right of Way before and after maintenance • LT IN-CO - ATE III; Aerial view of the tower before and after maintenance – LT ASS-STAR – ATE I; Relocation of orchids • Miracema Project.

## WILDLIFE MONITORING PROGRAM

Treatment of observations of fatalities in the right of way, bird nests, anthills and hives.



Photos 11-13: Monitoring of Fauna Itabitiro 2 – Vespasiano 2

## PROGRAM FOR MONITORING OF ACTIONS ON INDIGENOUS LANDS

Follow-up of managerial actions of recovery, maintenance or any other action in Indigenous Lands.

## PROGRAM FOR INTERFERENCES IN MINING AREAS

It aims to identify and quantify deposits and propose solutions and alternatives as to the indemnity and/or relocation of the affected units or their resignation.

## PROGRAM OF STUDIES AND PRESERVATION OF ARCHAEOLOGIC

It aims to manage the archaeological studies, considering the research in spaces aimed at the deployment of transmission lines, besides the identification of sites, the archaeological rescue and special service in areas of high relevance



Photos: Archeological Rescue Itabirito 2 –

## PROGRAM FOR MONITORING OF ELECTRICAL, MAGNETIC AND NOISE EFFECTS

Consists in the management of these effects through measurements and analyses of results obtained.

## ENVIRONMENTAL TRAINING PROGRAM

It promotes the training of those involved in the EMS through learning and knowledge, having as a principle the fact that it is the people who make up the main instrument to achieve the program compliance and satisfaction.



Training with outsourced companies that perform vegetal suppression • LT 230 kV Marabá – Itacaiúnas

## PROGRAM FOR USE AND OCCUPATION OF RIGHT OF WAY

The Program for Use and Occupation of Right of Way consists of reporting, encouraging and establishing a better use of the right of way.

## ENVIRONMENTAL COMPENSATION PROGRAM

The aim is to carry out the transfer of financial funds as a way to compensate the environmental impacts resulting from the implementation of the transmission lines.



Delivery of works related to the first phase of Environmental Compensation with Funai (Indian National

## ELECTRICAL INTERFERENCE PERCEPTION PROGRAM

It consists of identifying, analyzing and validating the perception of the population surrounding the transmission line, regarding the operational effects of the line.

## PROGRAM FOR MONITORING INDEMNITIES AND RELOCATIONS

This program aims to follow-up and monitor the activities related to indemnity and relocation.

**OCCUPATION  
AL HEALTH  
AND SAFETY  
PROGRAM**

It aims at constant awareness regarding occupational safety. It is the Executive Board's culture to seek the best and safest work practices; to identify the problem, its causes and to adopt blocks to prevent occurrences with similar causes. TAESA's goal is the constant search for the Zero accidents of any kind.



Integration related to the zero accident commitment • Regional -

It is worth highlighting that TAESA has an structure, Security, Environment and Health Management (Technical Executive Board) to support the actions to be carried out in the field, as follows:

**REGIONAL  
SERVICES**

- Araguaína
- Assis
- Brasília
- João Pessoa

**TAESA  
REGIONAL  
UNITS**

- Araguaína
- Assis
- Brasília
- João Pessoa
- Escritório Minaçú
- TAESA Substations



The purpose of distribution is to maintain the Environmental Legality of the Operation and Maintenance Activities of the Company's Assets responsible for the Availability of the Electric Power Transmission System, implementing processes aimed at Environmental Management in all these Assets.

- **Regional - Brasília:** Headquartered in Minaçu / GO, serving 1,716 km of Lines (TSN - SE Serra da Mesa I to SE Bom Jesus da Lapa and NVT - SE Samambaia to SE Gurupi);
- **Regional - Assis:** Headquartered in the City of Assis – São Paulo, serving 1,241 km of Lines (ETEO, ATE I and STE);
- **Regional - João Pessoa:** Headquartered in João Pessoa /- PB, responsible for 1392 km of Lines (GTESA, PATESA, NTE, ATE II - SE Sobradinho to SE São João do Piauí and TSN - SE Bom Jesus da Lapa to SE Camaçari);
- **Regional - Araguaína:** Headquartered in Araguaína / TO, serving 2,610 km of Lines (ATE III, NVT SE Gurupi to SE Imperatriz and ATE II between SEs of São João do Piauí and Colinas).

**ENVIRONMENTAL EDUCATION PROGRAM (PAA) and COMMUNICATION SOCIAL (PC s)**

The Companies of the TAESA Group develop Social Communication and Environmental Education Programs involving communities in the vicinity

The topics covered in the Environmental Communication and Education program campaigns were as follows: burnings, vandalism, adequate waste disposal, use and occupation of the right of way, safe contact with the LT and disclosure of TAESA's telephone number 0800-701-6682 and the number 0800-61-8080 of the IBAMA Green Line. In addition to these topics, other issues were addressed, such as: Sexually Transmitted Diseases and other issues of general interest.

The financial funds invested are included in the costs of maintaining the Company's facilities.

**QUANTITATIVE DATA OF SOCIAL COMMUNICATION AND ENVIRONMENTAL EDUCATION CAMPAIGN 2018:**

Items/Concession	ETEO	ATE	STE	NVT	TSN	Gt ESA	pAt ESA	NTE	ATE II	ATE III	TOTAL
Cities visited	15	14	3	19	12	7	2	11	9	4	96
Schools visited	0	1	2	3	1	0	1	1	3	2	14
Institutions visited	9	3	1	1	0	0	0	0	0	0	14
Lectures conducted	3	4	0	9	1	1	1	1	4	1	25
Commercial establishments visited	0	1	0	3	0	0	0	0	0	0	4
Owners visited	9	9	34	89	842	258	22	460	48	14	1785
Total listeners • Target audience	743	454	454	762	907	258	148	585	835	177	5323

\*In 2017, total target audience was 9,524. The difference between periods is part of the program due to the criticality of acting with surrounding communities.

**RECORD OF CAMPAIGNS BY REGIONAL UNITS:**

**REGIONAL - BRASÍLIA**



Environmental education campaign around LT 500 kV, GU2/SM Novatrans sections, at towers T187 to T193 and 22 to 223 SMGU2



Environmental Education and Social Communication •

REGIONAL - ARAGUAÍNA



Environmental Education and Social Communication • Regional -



Environmental Education and Social Communication • Regional -



Environmental Education and Social Communication • Regional -

Finally, in order to demonstrate TAESA's attention to environmental activities, the Company regularly adopts measurements to enable the process of continuous improvement of its actions, as follows:

<b>PRUNING • volume of waste generated in m<sup>3</sup> per month</b>	<b>RESULTS</b>	
	<b>2017</b>	<b>2018</b>
<b>Comments:</b> All wood material above 10 cm in diameter (DAP) was delivered to the owner for use, and the thin branches are chopped and spread out of the right of way to accelerate biocycling.	66	60

<b>FIRES • Number of occurrences of degraded area due to fires</b>	<b>RESULTS</b>	
	<b>2017</b>	<b>2018</b>
<b>Comments:</b> The vast majority of fires that occur along the trajectory of LTs have their origin outside the rights of way and end up becoming forest fires. The vast majority of fires have a voluntary and criminal origin.	41	13

<b>OIL LEAK • leakage points</b>	<b>RESULTS</b>	
	<b>2017</b>	<b>2018</b>
<b>Comments:</b> The increase in the number of leaks is due to the explosion of the reactor and current transformers. Proper emergency actions were taken, pursuant to TAESA Safety, Environment and Health Policy and PP No. 013 SM. It should be emphasized that the occurrences did not give rise to environmental damage.	2	8

<b>ENVIRONMENTAL DIMENSION</b>		
<b>2017-2018 ANNUAL COMPARISON OF ENVIRONMENTAL INDICATORS • TAESA CONCESSION</b>		
<b>Waste generation and treatment</b>	<b>2017</b>	<b>2018</b>
<b>SOLID WASTE</b>		
Annual quantity (in tons) of solid waste generated (garbage, waste, rubble, etc.)	126.78	147.44
<b>Power Consumption by source (kWh) • use of funds in the production process and managerial processes of the organization</b>		
Fossil fuel Diesel and Gasoline (Liter)	358,534.83	583.051,47*
Total Power Consumption (in KWh)	4,681,788.81	2,664,152.89
Supply of public network water (m <sup>3</sup> )	5,422,399	70,504.46
Underground source (well)	No record	0
Water consumption per employee (m <sup>3</sup> )	10.78	144,14**
<b>Environmental education and awareness</b>		
<b>In the Organization</b>		
Number of employees trained in environmental education programs	30	47
Percentage of employees trained in environmental education programs / total employees	5.96%	14%
Number of hours of environmental training	23	56
<b>In the community</b>		
Number of primary and secondary education units served	53	16
Percentage of schools served / total number of schools in the concession area	10.49%	3.77%
Number of teachers trained	53	105***
Number of people served	9,524	991

\*Increase in fleet (M&O and Projects under implementation) \*\* Increase due to works (reinforcements, improvements and implementation) of projects.

## SUSTAINABILITY

### CONCEPT

Sustainability, following a classical and impartial theoretical line, may be understood as the set of actions that enable a biome to continue alive, health and having all that is necessary to face inherent risks, strengthen, thrive and evolve. So, it can be noted why Sustainability is considered as an horizon, as a constant search for improvement.

Considering its etymology, related to terms such as “sustain”, “support” and “underpin”, the word “Sustainability” has been used, since the decade of 1970, together with the word expression “Sustainable Development”, to refer to mitigation of human activities, permitting to support them on solid bases, sustained by themselves and underpinned by the terrestrial ecosystem. Therefore, Sustainability essentially tends to balance the needs of contemporary society with the needs of future society.

### BACKGROUND

Until the last century, in the global common sense, the notion that the earth was an inexhaustible source of resources and that human activity was not significant to affect the Terrestrial System and its biodiversity prevailed. However, since the 2<sup>nd</sup> Industrial Revolution (1870 – 1945), visible adverse effects have multiplied: contamination of rives and soils that before were a source of drinkable water, food and income for governments, peoples and communities; acid rains that damaged plantations and water tables; thermal inversion, extinction of species causing imbalance in ecosystems; lung diseases caused by atmospheric pollution; weakening of the ozone layer related to increased global temperature (greenhouse effect) and increase in sea level due to melting of polar ice. These, among other factors, worked as an evidence for the thesis that such conception was mistaken, and that Earth could not stand human activity.

Then, in the decade of 1970, through mathematical models developed by the MIT (Massachusetts Institute of Technology), in the United States, the forecasts of certain scientists, NGOs and groups of Civil Society about the environment were proven. Therefore, it was certified that the exponential model of production, consumption and disposal in effect (known as Life Cycle Evaluation – LCE), together with the disorganized growth of world population, were not compatible with the Planet’s capacity to supply natural and energy resources and it would not support the long-term global economic development.

In that same decade, based on these ideas, an international movement was strengthened, backed by the United Nations, aimed at rethinking human interaction with the environment. This movement, which put into vogue the conflict between the economic development model versus ecosystems and biodiversity, resulted in a several conventions, summits, conferences, protocols, treaties and international forums to debate a sustainable social and economic development model.

In summary, the main global events about the environment and that are the basis for this theme were: Stockholm Conference (Sweden, 1972) where the UNEP (United Nations Environment Program), main international player on the environment, was created; Brundtland Report (1987) that defined the bases and opened new paths for sustainable development; Earth Summit (Rio de Janeiro, 1992) which established terms and actions plans to address climate change; Kyoto Protocol (Japan, 1997), which established the nations’ commitment to reduce polling gases emissions; Millennium Summit (New York, 2000) where the Millennium Development Goals were created (precursors of the Sustainable Development Goals).

Agenda 21, in turn, comprised as basic assumptions goals focused on social inclusion, education, health, distribution of income, urban sustainability and policies for a planned economic growth towards sustainable development.

## SUSTAINABLE DEVELOPMENT GOALS • ODS

In 2015, the 21<sup>st</sup> Conference of Parties (COP-21) was held, where the Paris Agreement was signed, in France. The Conference was held to discuss the results of the Millennium Goals, which main scope was to contain global warming by 2°C until 2100. 175 countries signed the Treaty, thus corroborating the 17 Sustainable Development Goals and 169 targets to be achieved until 2030.

Currently, the Paris Agreement is the most relevant and respected International Treaty on Sustainability. It is the current guidance on the sustainable development topic. The Goals are represented in the images below:



- **ODS 1.** End poverty in all its forms everywhere.
- **ODS 2.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- **ODS 3.** Ensure healthy lives and promote well-being for all at all ages.
- **ODS 4.** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- **ODS 5.** Achieve gender equality and empower all women and girls.
- **ODS 6.** Ensure availability and sustainable management of water and sanitation for all.
- **ODS 7.** Ensure access to affordable, reliable, sustainable and modern energy for all.
- **ODS 8.** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- **ODS 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- **ODS 10.** Reduce inequality within and among countries.
- **ODS 11.** Make cities and human settlements inclusive, safe, resilient and sustainable.

- **ODS 12.** Ensure sustainable consumption and production patterns.
- **ODS 13.** Take urgent action to combat climate change and its impacts<sup>(\*)</sup>.
- **ODS 14.** Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- **ODS 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- **ODS 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
- **ODS 17.** Strengthen the means of implementation and revitalize the global partnership for sustainable development.

<sup>(\*)</sup>Acknowledging that the United Nations Framework Convention on Climate Change is the primary intergovernmental international forum to negotiate the global response to climate change.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE • ASG

Bringing these themes to the practical domain, Sustainability is applicable to several segments of human activity. Sustainability is inherent not only in governments, large polluting industries and metropolises. Any activity that strengthens its basis and avoids failures, is, by itself, a sustainable practice. Therefore, Sustainability assumptions and SDG are also inherent in corporate activity. Sustainability is applicable to public policies, educational methods, health treatments, relationships and even to mental health, to new technologies in companies.

Another topic frequently addressed when dealing with corporate sustainability are the methods and techniques in key operating areas that brought - and are still bringing – positive results for a company’s sustainability. They are the Environmental, Social and Governance – ESG dimensions. ESG practices expanded the entrepreneurs’ past vision that considered the need for sustainability only due to the concern of exhaustion of their raw materials. By detailing the ESG practices, it is possible to notice the extent of the actions applicable to the improvement of the social and environmental performance of an organization:

ESG	
ENVIRONMENTAL	Environmental impact
	Risk Management
	Environmental Performance
	Partnerships for Environmental Solutions
	Impact in climate changes
	Raw materials
	Water shortage
	Sector Environmental Impacts (chemical, etc)
	Pollution
	Discard of waste
	Damage to biodiversity
	Innovation, Clean Technologies and Renewable Energies
	Reporting
	CAPITAL
Work conditions	
Relationship with Clients and Suppliers	
Collaborator Relation	
Engagement with stakeholders	
Involvement with Communities	
Sector Social Impacts	
Information Security	
Collaborator diversity	
Reporting	
GOVERNANCE	Executive Board’s practices
	Power structure
	Code of Ethics
	Risk Management
	Relationship - Executive Board - Stakeholders
	Executive Board’s Diversity
	Bribery and Corruption
	Information Security
	Reporting

It should be pointed out that the companies that adopt the ESG practices have:

- Greater ease to adjust to legislation;
- Lower rate of provisions for environmental lawsuits and labor claims;
- Great ease of access to capital (prestige with the market, shareholders, inspection bodies and governments);
- Lower levels of boycott from customers and suppliers;
- Lower rates of conflicts with the community;
- Lower corruption rate;
- Higher employee's life quality;
- Lower turn-over rate;
- Lowest rate of occupational accidents;
- Lower rates of strikes and stoppages;
- Greater ease to access new markets;
- Wider vision of risks;
- Greater investment effectiveness;
- Smaller carbon footprint and lower emissions of Greenhouse Gas Effect (GGE);
- Optimized consumption of resources (raw material, fuel, electric energy, water, etc);
- Lower risk of being affected by financial, political and environmental crises; and
- Highest market value.

Therefore, it is understood that, just like the planet, a forest or a species, a company also works as a live being. A company, but adopting ESG practices and moving towards sustainability, is searching for ways to survive, be healthy and have the required funds to thrive, to be strong and to grow – and vice-versa.

Having this in mind and being aware of its social, economic and environmental responsibilities, as well as the principles and purposes that have led us to where we are today, **TAESA** started to implement the Project that has the following purposes:

**The objective of the project is as follows:**

- To determine the sustainability level in which **TAESA** is now – adopting as benchmark the companies of the national and international electric sector;
- To develop and implement an action plan to map and adopt as many ESG practices as possible in the short, medium and long term;
- To expand the range of possibilities to progress in sustainable practices and improve those already adopted, as well as to report them;
- To include **TAESA** in a selected group of companies that stand out for their sustainable development;
- To map and engage responsible investors aiming at meeting the increasing global demand of the capital market for sustainable investments – also known as SRI (Socially Responsible Investing);
- Value Company's image;
- Improve communication with stakeholders;
- To strengthen the suppliers base;
- To impact the company's income and valuation;
- To reduce its business risks.

After certain actions already taken during the Project, such as interviews, analysis of in-house and external data, information, documents, policies, procedures and informal practices, it was possible to identify certain ESG practices relevant for this topic. Some examples are:

- Sound and diverse policies;
- Nonexistence of history of stoppages and/or strikes;
- Safety, Environment and Health Policy;

- Remuneration and career policy;
- Quality of the Annual Sustainability Report;
- Risk management policy;
- Private social incentive;
- Several social and/or environmental programs for communities surrounding the developments;
- Open channel for inquiries and complaints of communities;
- Mapping risks to safety, health and the environment;
- Anonymous complaint mechanisms;
- Code of Ethics
- Anti-corruption and Bribery Policy;
- Report of water, fuel and energy consumption;
- Management system for environmental and operational risks with certification ISO 14.001;
- Procedures for waste management, dangerous or not;
- Environmental Research and Development Projects;
- Policy of hiring suppliers and third-parties;
- Formal commitment on human rights and non-discrimination;
- Nonexistence of history of penalties or sanctions for environmental crimes;
- Subsidy program for employee education;
- Volunteer initiatives such as the Godmother Company Project, in partnership with SENAI, that joins students, companies and industries;
- Environmental Project Guardians of Lontra River and selective collection.



Support the to the Project Guardians of Lontra River (City of



Implementation at GMR headquarters and other offices and substations the selective collection with destination for waste for waste cooperatives that make the weighting, sorting and destination of such waste (City of Araguaína / TO)



Qualification event resulting from the Godmother Company Project (City of Araguaína / TO)

In view of this, TAESA ratifies the importance of developing and improving the ESG Sustainability theme, and this fact will be more evidenced over 2019, period in which the company expects to plan actions aiming at being included in the list of the best companies in the energy sector.

## **ABBREVIATIONS:**

- NOVATRANS • Novatrans Energia S.A.
- TSN • Transmissora Sudeste Nordeste S.A.
- ETEO • Empresa de Transmissão de Energia do Oeste S.A.
- NTE • Nordeste Transmissora de Energia S.A.
- STE • Sul Transmissora de Energia S/A
- ATE • Transmissora de Energia S/A (ATE)
- ATE II • Transmissora de Energia S/A (ATE II)
- ATE II • Transmissora de Energia S/A (ATE II)
- SÃO GOTARDO • São Gotardo Transmissora de Energia S.A.
- EATE • Empresa Amazonense de Transmissão de Energia S.A.
- Ect E • Empresa Catarinense de Transmissão de Energia S.A.
- ENTE • Empresa Norte de Transmissão de Energia S.A.
- ERTE • Empresa Regional de Transmissão de Energia S.A.
- ET EP • Empresa Paraense de Transmissão de Energia S.A.
- EBTE • Empresa Brasileira de Transmissão de Energia S.A.
- ST C • Sistema Catarinense de Transmissão S.A.
- ESDE • Empresa Santos Dumont de Energia S.A.
- Lumitrans • Lumitrans Companhia Transmissora de Energia Elétrica S.A.
- ETSE • Empresa Serrana de Transmissão de Energia S.A.
- Orteng • Orteng Equipamentos e Sistemas S.A.
- Transmissora • Companhia Transudeste de Transmissão
- MARIANA • Mariana Transmissora de Energia S.A.
- ET AU • Empresa De Transmissão do Alto Uruguai S.A.
- BRASNORTE • Brasnorte Transmissora de Energia S.A.
- JANAÚBA • Janaúba Transmissora de Energia S.A.
- PARAGUAÇU • Interligação Elétrica Paraguaçu S.A.
- AIMORÉS • Interligação Elétrica Aimorés S.A.
- IVAÍ • Interligação Elétrica Ivaí S.A.
- ANEEL • Brazilian Electricity Regulatory Agency

**EXECUTIVE BOARD:**

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