


An aerial night view of a densely populated city, likely São Paulo, Brazil. The city is illuminated with numerous lights from buildings and streets, creating a vibrant, glowing effect. The sky above is a mix of dark blue and orange, suggesting a sunset or sunrise. The overall scene is a panoramic view of the city's urban landscape.

Annual & Sustainability
Report 2015

CEMIG

MAIN CEMIG INDICATORS

Financial data (Economic Dimension - in R\$) are consolidated, in accordance with IFRS (International Financial Reporting Standards). The other figures refer to the group holding company Cemig – Companhia Energética de Minas Gerais S.A. and its wholly-owned subsidiaries: Cemig Distribuição S.A. (Cemig D) and Cemig Geração e Transmissão S.A. (Cemig GT), and are presented in accordance with the standards of Global Reporting Initiative - GRI. 

For more information on the GRI methodology, please visit the website: www.globalreporting.org

SCALE, PERFORMANCE, CAPACITY		2011	2012	2013	2014	2015
Number of consumers (thousands) ¹		7,336	7,535	7,781	8,008	8,078
Number of employees (LA1)		8,706	8,368	7,922	7,922	7,860
Municipalities served		774	774	774	774	774
Concession area - km ² ²		567,740	567,740	567,478	567,478	567,478
SAIFI – average outage frequency (EU28)		7.00	7.05	6.26	5.58	5.87
SAIDI – average outage duration (EU29)		14.32	14.74	12.49	10.77	11.53
Number of plants in operation ³		66	70	70	70	84
Installed capacity, MW (EU1) ⁴		6,964	7,038	7,038	7,717	7,800
Total length of transmission lines – km (EU4) ⁴		8,794	9,413	9,748	9,748	9,748
Total length of subtransmission lines – km (EU4)		16,915	17,594	17,218	16,160	16,160
Total length of distribution network – km (EU4)	Total	467,679	480,932	486,045	491,848	494,550
	Urban	93,823	96,182	98,175	99,818	101,454
	Rural	373,856	384,750	387,870	392,030	363,096
THE ECONOMIC DIMENSION		2011	2012	2013	2014	2015
Net operational revenue, R\$ mn		15,749	14,137	14,627	19,540	21,292
Ebitda – R\$ mn		5,351	5,084	5,186	6,382	4,955
Net profit (loss) – R\$ mn		2,415	4,272	3,104	3,137	2,492
Stockholders' equity – R\$ mn		11,745	12,044	12,638	11,285	12,995
Market valuation – R\$ mn		22,694	19,292	17,629	16,812	7,843
Dividends paid – R\$ mn ⁵		2,036	2,918	2,818	797	633
Dividend Yield (%)		10.4	12.4	22	9.2	4.5
THE ENVIRONMENTAL DIMENSION		2011	2012	2013	2014	2015
Funds applied in the environment – R\$ mn (EN31) ⁶		53.4	59.4	52.4	52.8	53.8
Fuel consumption – vehicle fleet (in GJ)		198,640	180,407	169,470	144,780	152,944
Installed capacity free of GHG emissions (%)		97.2	97.3	97.3	97.3	98.1
Total water consumption – m ³ (EN8) ⁷		1,597,078	1,449,756	1,313,486	1,424,540	698,049
Direct CO ₂ emissions – metric tons (EN15)		24,506	53,573	146,101	617,717	164,537
R&D investment related to environment (R\$ mn)		2.5	6.6	10	11.7	8.5
THE SOCIAL DIMENSION		2011	2012	2013	2014	2015
Average hours of training per employee (LA10)		43.18	35.50	69.60	49.37	37.26
Total funds applied in social responsibility – R\$ mn ⁸		75,074	115,023	83,234	109,622	75,751
Accident frequency rate – own employees (LA7) ⁹		0.25	0.23	0.34	0.34	0.41
Accident frequency rate – outsourced employees (LA7) ⁹		0.79	0.51	0.45	0.42	0.55

¹ Numbers of consumers by category are given in the item Cemig's Market

² Figures are for the distribution concession (*Minas Gerais* State) of Cemig D.

³ Figures for Cemig.

⁴ Figure for Cemig Consolidated – including interests in subsidiaries and affiliates proportionally, with adjustments in prior years for compatibility with the new criterion

⁵ Dividend for 2015 to be proposed to the AGM to be held by April 30, 2016.

⁶ Sum of funds allocated to the environment in Operation and Maintenance.

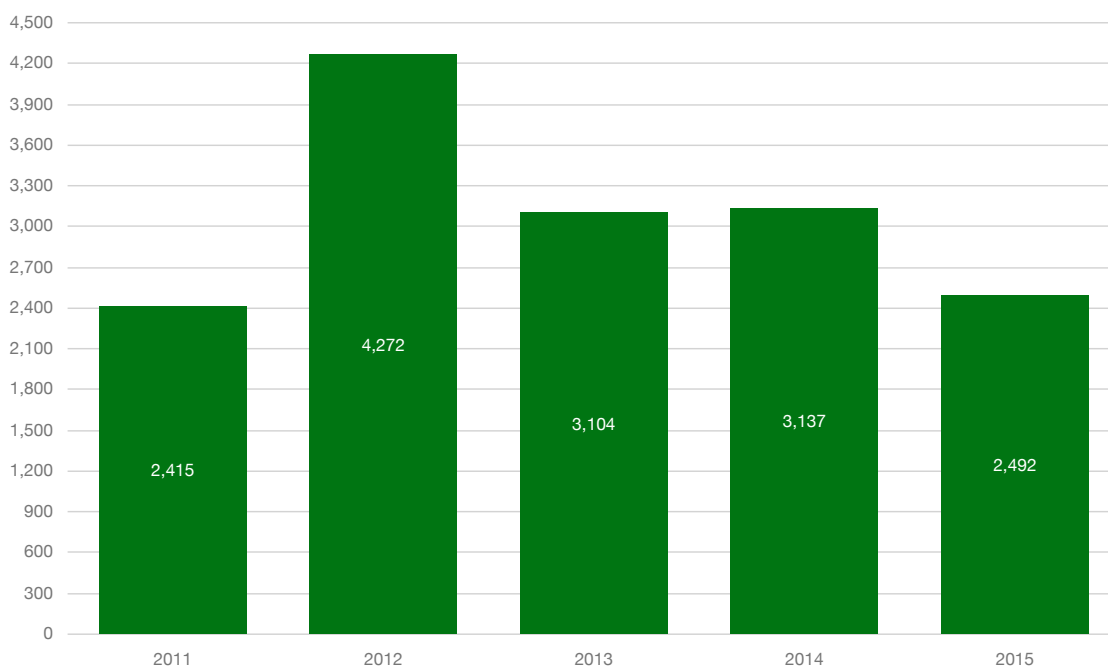
⁷ Total water consumed for administrative and industrial purposes.

⁸ Sum of funds reported under External and Internal Social Indicators – see these in detail in the Social Statement.

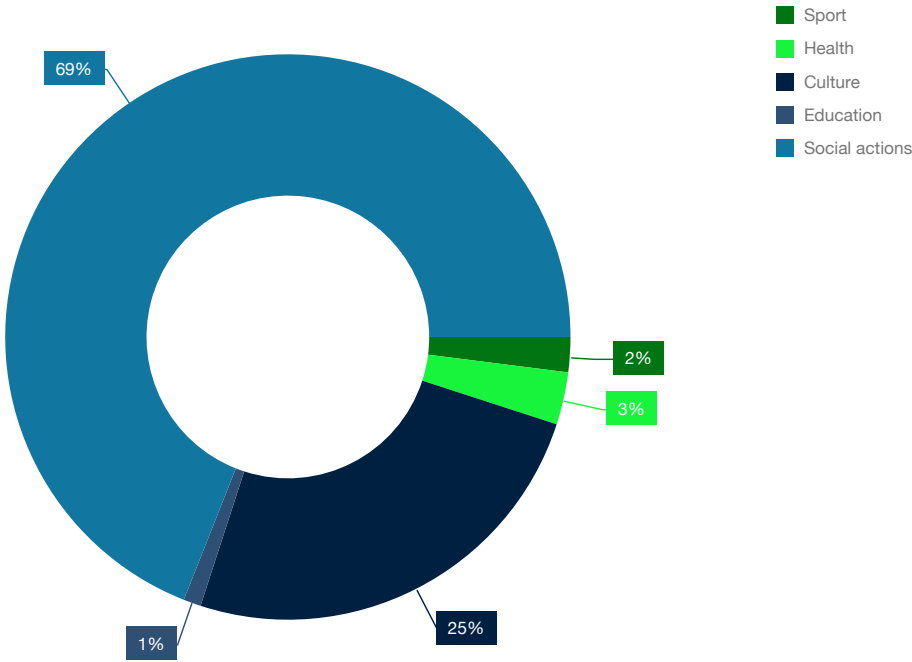
⁹ Number of accidents resulting in injuries with time lost, per 200,000 hours worked.

SELECTED GRAPHS

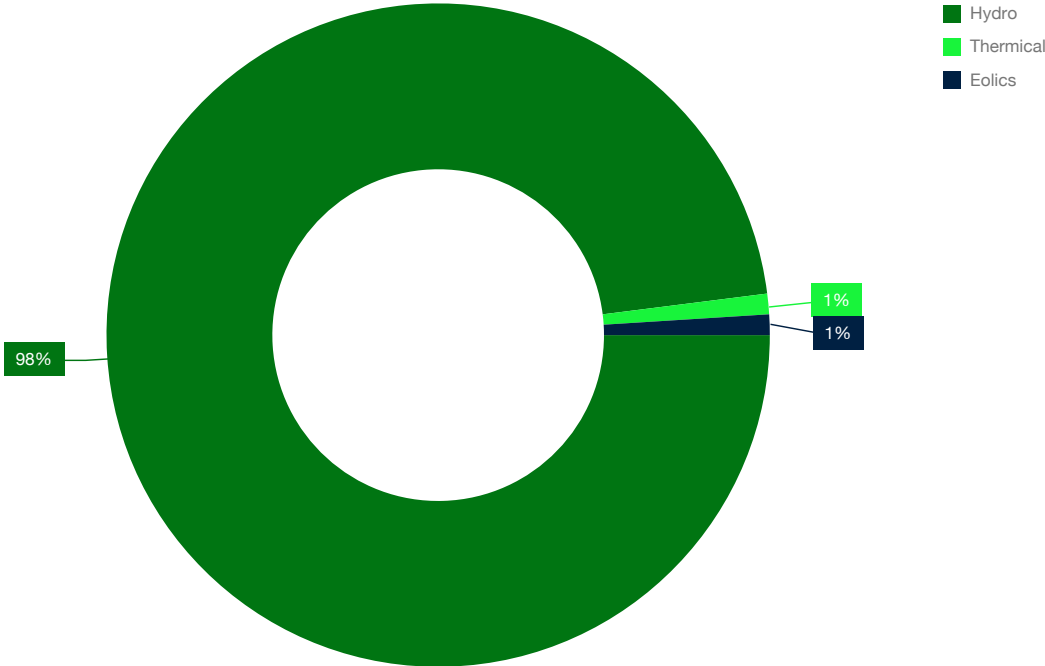
Net profit – R\$ mn



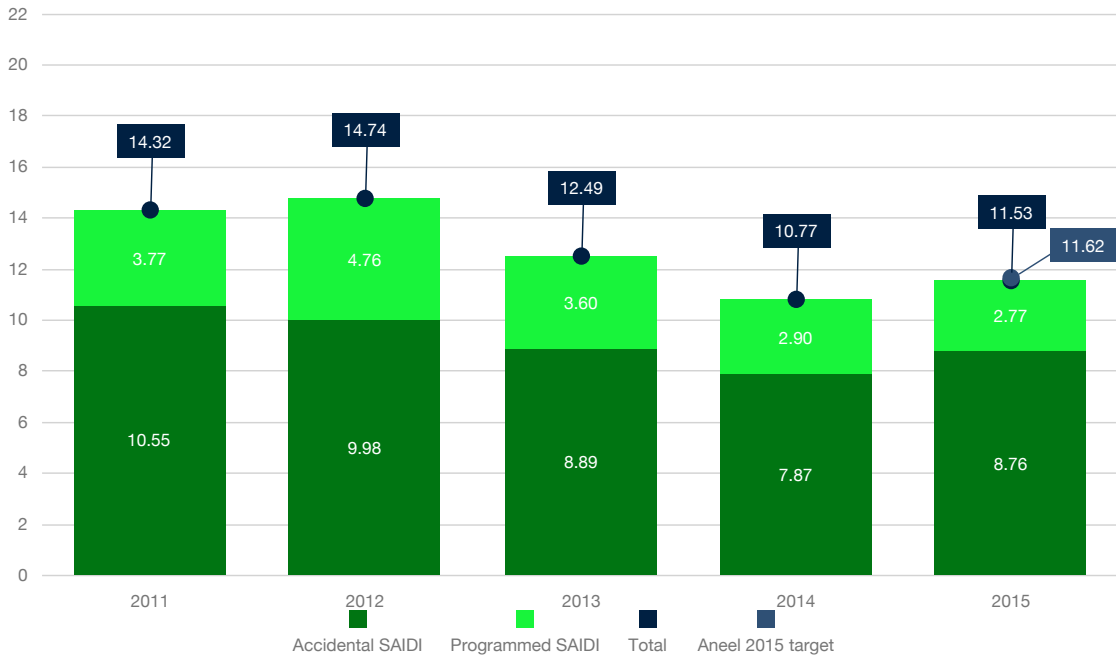
Areas of Social Investment



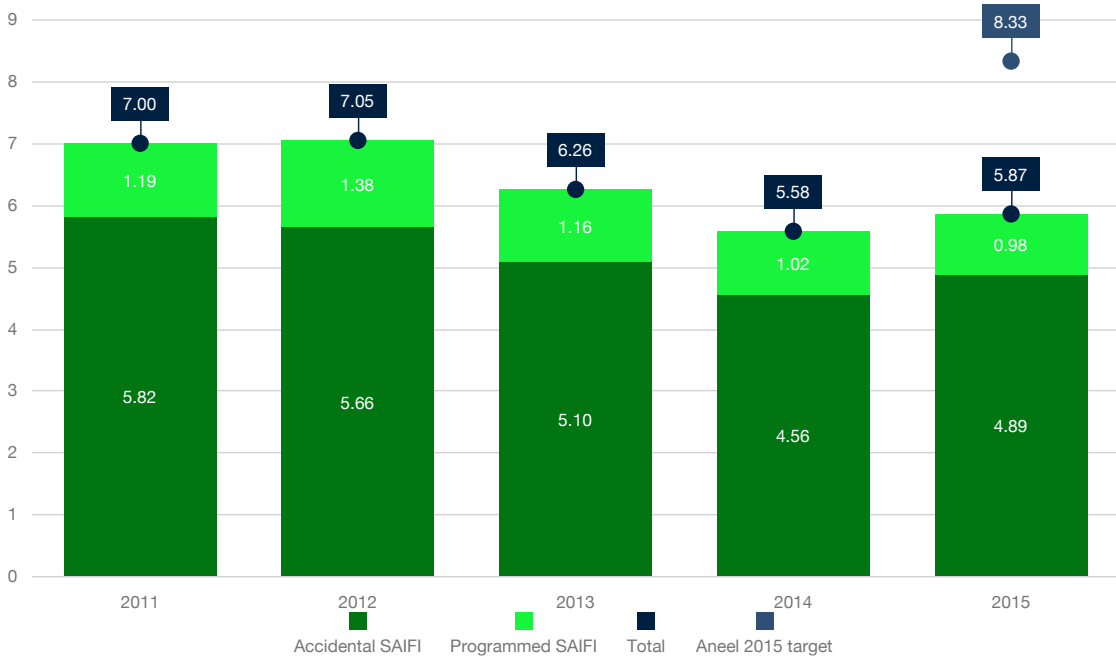
Generating Plants by Source - MWh



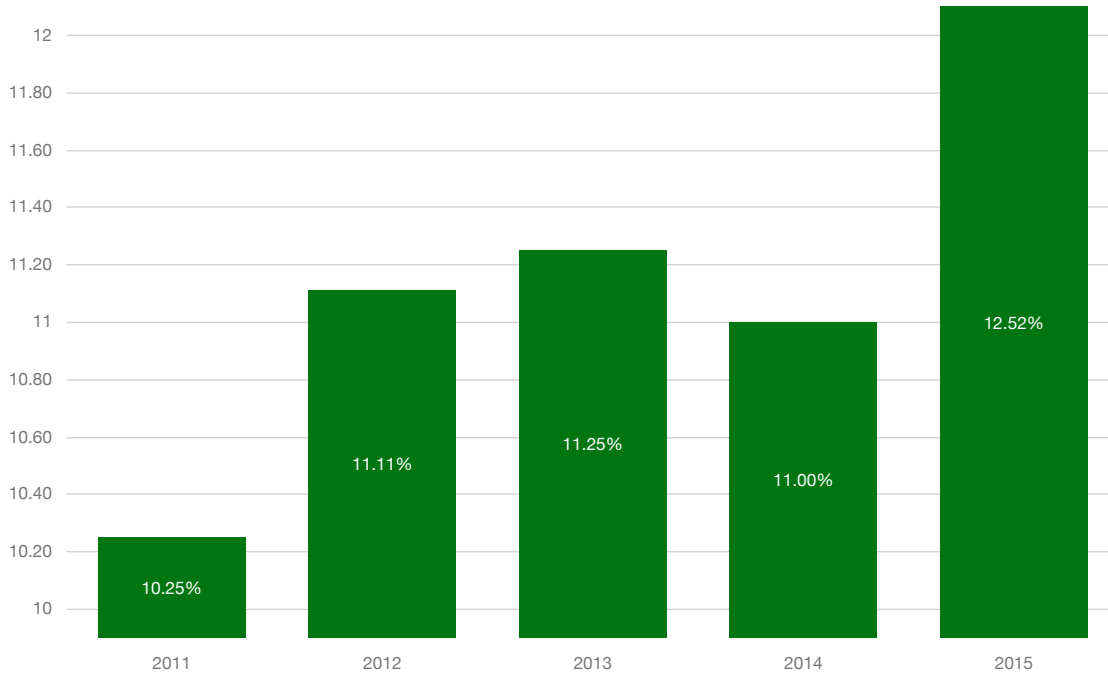
SAIDI



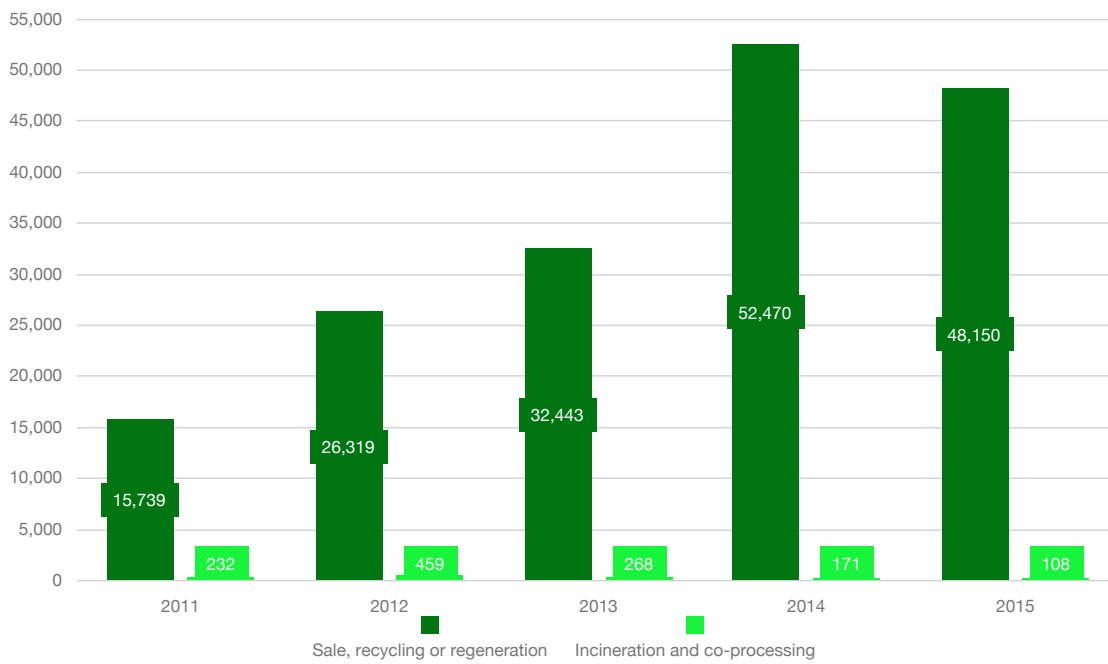
SAIFI



Total Losses in Distribution

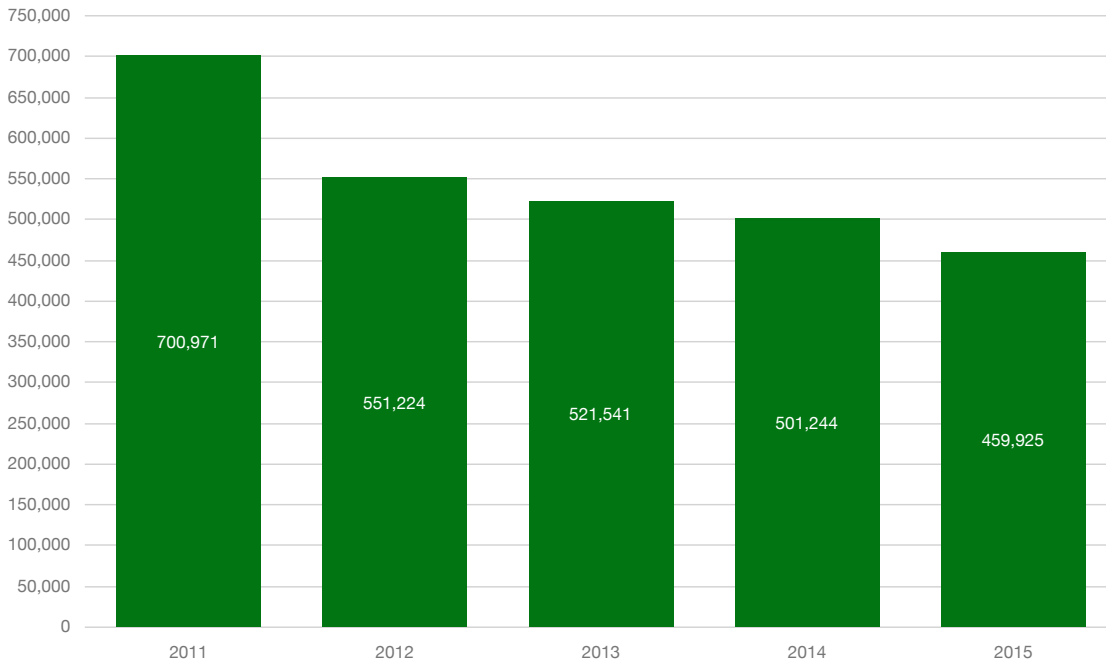


Final disposal of wastes (t)*

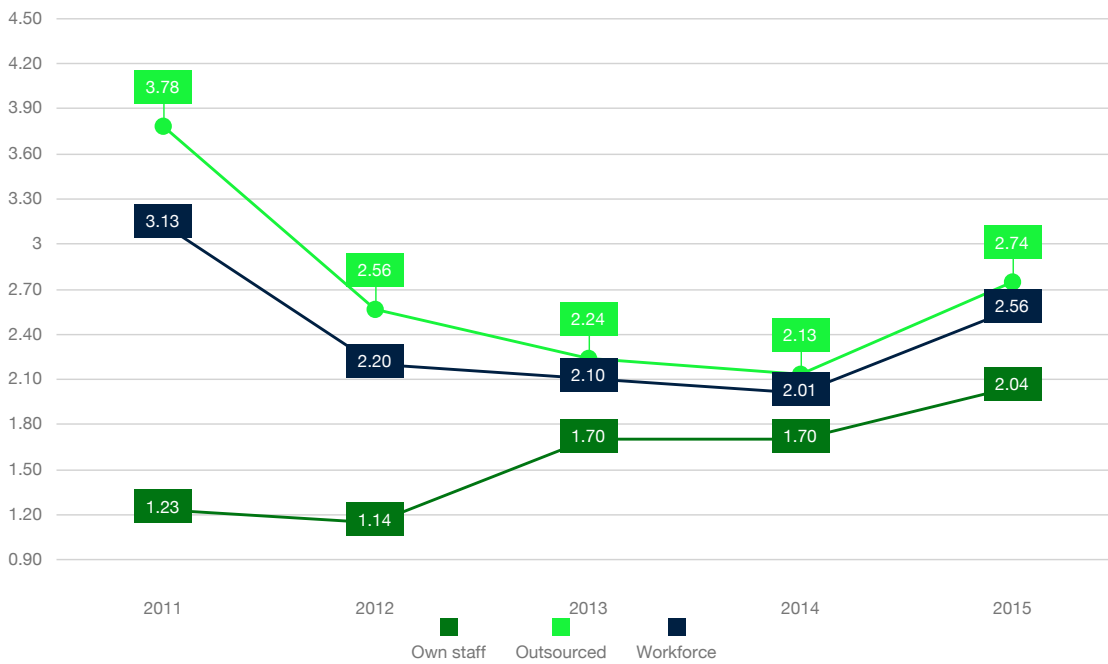


* Waste sent to landfill in 2015 = 12 t

Water consumption – Administrative (m³)



Rate of accidents with lost time (TFA)



ABOUT THIS REPORT

INTRODUCTION

THIS REPORT

This is Cemig's Annual and Sustainability Report, on the year 2015. It gives information on the Company's performance for all of its operations, and principally, its actions to create and maintain value, materializing the strategic objectives, and to

contribute to the Company's sustainability in the economic, social and environmental dimensions. This report is published annually. This edition refers to the business year ended December 31, 2015. It is a comprehensive corporate instrument designed to be a point of reference for dialog with all stakeholders in the Company's activities and performance; it also serves as a management tool, enabling Cemig's various business areas to show the development of the indicators and metrics under their responsibility, and comment on the factors that influence performance in the year.

All accounting data disclosed in this report has been previously audited by *Deloitte Touche Tohmatsu Auditores Independentes* for the Company's financial statements, which are presented according to International Financial Reporting Standards (IFRS) and are available on the Cemig website. As a guarantee of overall quality and of the content of the data contained in this report, in addition to the audit of economic and financial data Cemig has commissioned independent verification, with reasonable scope, of the application of the principles and indicators of the Global Reporting Initiative (GRI) in this report. This was carried out by *SGS do Brasil*.

If there has been any revision of the information that was presented in previous reports, for example due to reclassification or a revision of methods of measurement, an explanation of any changes is given adjacent to the data, for ease of understanding.

This report on the year 2015 complies with the following requirements, which were also adopted in the report on 2014:

- 1) Adoption of the GRI G4 methodology, a worldwide trend for production and disclosure of corporate reports.
- 2) Publication of two versions of the Report, the 'G4 Core' report, and the 'G4 Complete' report. The G4 Core report is concise, and gives priority to the indicators that focus on the most important subjects for the Company and its stakeholders. This Comprehensive report presents a wider group of indicators, as well as the GRI Sector Supplement for the Electricity Sector, and a report on progress in compliance with the 10 principles of the Global Compact. This complete version ensures continuity of supply of the data and indicators that were presented in previous reports. In spite of this additional information, this present version does not meet the requirements for being considered as 'Comprehensive' according to GRI standards.
- 3) For each one of the 12 aspects identified in the materiality test, Cemig has provided, over the length of the report, Disclosure of Management Approach (DMA): Under the G4 methodology, this must include an explanation of the importance of the issue to the Corporation, how it is managed, what risks are involved, and what the related goals and objectives are – among other information.

Additionally, the Company has tried, even though partially, to follow the guidelines of the International Integrated Reporting Council (IIRC), which includes the firm's business model and information on integration between programs and projects.

Both versions, the Complete and the Core, are available to read or download on the Cemig website, including formats that are compatible with tablets and smartphones.

Questions regarding this report can be directed to Cemig's Sustainability Management Unit (sustentabilidade@cemig.com.br) or to the Investor Relations Department (ri@cemig.com.br).

LIMITATIONS OF THE REPORT

G4-18 The financial data presented in this report refer to the group of companies in which the holding company, Cemig (Companhia Energética de Minas Gerais) holds operational control, except when mentioned in the text. However, the non-accounting information is primarily for the holding company and the wholly-owned subsidiaries Cemig Distribuição S.A. (Cemig D) and Cemig Geração e Transmissão S.A. (Cemig GT), but where indicated may also cover other Cemig Group subsidiaries. The accounting data is consolidated according to criteria established by Brazilian Law (for more details, see Note 3 of the

Standardized Financial Statements (*DFP*) on the Company's website). The name **Cemig** is used in reference to the group of companies. The terms **Group** and **Company** are used as synonyms of 'Cemig' unless otherwise stated in the text. The name **Companhia Energética de Minas Gerais** is used when the reference is to the holding company alone, i.e. excluding all subsidiaries.

The scope of activities covered by this report has not changed in relation to the previous year.

THE MATERIALITY MATRIX AND PARTICIPATION OF STAKEHOLDERS

G4-17 The Materiality Test is a procedure used annually by Cemig, with the maximum breadth and depth possible, to ascertain the expectations of stakeholders within the organization's area of influence. It indicates what aspects it will be appropriate to cover in communications with the various publics, and also serves as a guide for the Company's management systems. The **G4-27** Materiality Test procedure used to construct Cemig's 2015 Annual and Sustainability Report was carried out between the months of July and November 2015.

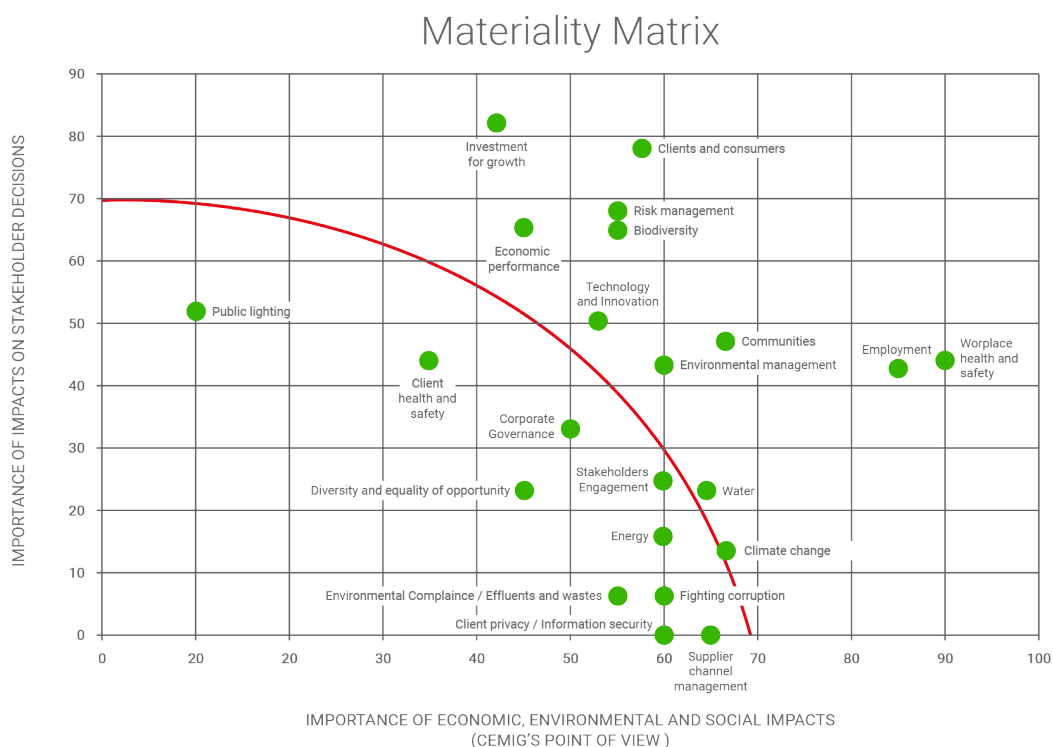
Through an institutional process known as Stakeholder Mapping, the Company has defined the relationship groups shown in the table below as priority stakeholders. Based on this, sources for consultation were sought out, corresponding to each of the groups, to arrive at the material subject areas. The process was permeated by the principles defining the report established in the GRI methodology – G4-19, G4-23, and G4-21.

STAKEHOLDER	MATERIAL INDICATORS	SOURCES CONSULTED	SCOPE
Investors	Clients and consumers (Tariffs / Sales, Concessions, Electricity quality), Investment for growth, Risk management, Economic development.	Fale com RI (Talk to RI)	Internal and external
Community	Clients and consumers (Relationship with clients), Workplace health and safety, Employment, Investment for growth, Risk management, Biodiversity, Communities (Local communities, Social investment), Economic performance, Environmental management, Technology and innovation, Water, Climate change (Emissions)	Face-to-face reports (Irapé) and Sustainability Channel	Internal and external
Suppliers	Clients and consumers (Tariffs / Water quality), Workplace health and safety, Employment (Training and Education), Investment for growth, Risk management, Biodiversity, Communities, Technology and innovation.	Interview with manager of the department	Internal and external
Corporate clients	Clients and consumers (Relationship with clients / Tariffs / Availability and Reliability), Investment for growth, Biodiversity, Economic performance, Technology and innovation.	Commercial relationship agent	Internal and external
Residential consumers	Clients and consumers (Relationship with clients / Tariffs / Availability and reliability, Public lighting / Electricity quality), Workplace health and safety, Investment for growth, Risk management, Biodiversity, Communities, Technology and innovation.	Mix of service channels, Ombudsman, Surveys, IASC (Consumer Satisfaction Index), Reputation and Brand	Internal and external
Press / media	Clients and consumers (Relationship with clients / Tariffs / Availability and reliability, Public lighting), Workplace health and safety, Investment for growth, Risk management, Biodiversity, Communities, Technology and innovation.	Clipping service	Internal and external
Employees	Employment (training)	Company atmosphere survey	Internal and external
Government authorities	Clients and consumers (Relationship with clients / Availability and reliability / Public lighting)	IASC survey with prefectures	Internal and external

To perform the Materiality Test, which followed the guidelines of the GRI G4 materiality principle, Cemig used a combination of input methods: external and its own internal data sources, including its strategic planning; research on stakeholders'

perceptions carried out during the year through corporate communication channels; sustainability rating agencies; news clippings published about Cemig and its economic sector; consideration of internal policies, media analysis, organizational values, organizational climate change results; risks and opportunities, and internal perceptions collected through direct participation of key members of management.

This procedure resulted in the Materiality Matrix shown below, which indicates the 12 aspects of the study considered to be most material (on the right-hand side of the curve). These will be the main topics addressed in this report. The report also addresses other aspects not included among these 12, but with less emphasis.



The process of developing the methodology to be applied to the Materiality Test, and its final result, were subjected to independent verification by *SGS do Brasil*.

REFERENCES OF THE CONTENT INDEX

The Content Index referring to the GRI Indicators and Global Compact Principles at the end of this report presents a summary of all the available information.

Tags throughout the text highlight the related GRI indicators, material aspects (DMAs) and Global Compact principles – helping the reader to associate and locate the corresponding indicators or principles.

GLOSSARY

For optimum understanding of the terms used, Cemig has created a glossary, available at:

<http://ri.cemig.com.br/static/enu/glossario.asp?idioma=enu>

MESSAGE FROM MANAGEMENT

The year 2015 presented the Company with several major challenges.

In spite of all the difficulties in the macro environment, which were also reflected in the electricity sector, we achieved successes in 2015 that enable us to take an optimistic view of the Company's future.

Our net profit was R\$ 2.5 billion – lower than in 2014, but still a significant result in a period in which Brazilian companies have shown falling profit margins and indeed many have reported losses.

In our approach to leverage, we have been conservative in our management of debt. Our gross debt increased year-on-year in 2015 only because of the funds raised in the fourth quarter of the year to pay the Concession Grant Fee relating to the generation auction that we won in October. In this specific case we note that the servicing of the debt is partially offset as early as the first year by the cash flow from the plants in question.

We have a significant volume of debt maturing in 2016. This however is the subject of current negotiations with financial institutions, and there are significant positive prospects of extending maturities for these financings into the long term, creating more liquidity for the Company and less pressure on its cash position.

In December 2015 we won the concession for Lot D of the generation plants in the auction held by the Mining and Energy Ministry. This enables Cemig to continue to operate – for the next 30 years – the 13 plants for which it previously held the initial concessions, under which periods expired in 2015. Four very important plants in this group are the *Três Marias*, *Salto Grande*, *Itutinga* and *Camargos* plants. The group also comprises a further five, smaller, plants that were previously not operated by the Company.

Operation of these plants brings an addition of 700 MW to our total installed generating capacity, and additional annual revenue of R\$ 500 million.

Also, in spite of the challenges we faced in 2015, we invested nearly R\$ 1 billion in our electricity distribution business – demonstrating our commitment to the quality of our service, and to the community for whom we work.

These significant investments that Cemig has been making are reflected in our quality indicators and the satisfaction of our clients. In 2015, we met the requirements for regulatory indicators that measure frequency of supply outages, and also – a source of pride for all of us – we won first place in the Aneel Consumer Satisfaction Index (IASC) for 2015, in the category of Companies with more than 400,000 consumers in Brazil's Southeastern Region.

We are conscious of the importance of improving our operational efficiency, especially in the current economic situation, and we have the challenging aim, as priority, of adjusting our costs to the limits established by the regulation for the sector, but without adversely affecting the quality of the services that Cemig provides to its clients.

At moments of uncertainty, the question of sustainability comes even more sharply into focus. We reaffirm our commitment to the principles of sustainability and social responsibility. This commitment is reaffirmed by our presence in the Dow Jones Sustainability World Index, in which we have been included since 1999 – and by our inclusion in numerous Brazilian and international sustainability indices. All these are external recognition of our continuing actions in favor of sustainability.

In the next year, we know that the challenges will continue to be present. Although we can foresee a scenario of low demand for electricity, with reduction in prices, we are prepared and ready to deal with this moment of uncertainty and instability, with

the conviction that our actions will ensure the sustainability of our operations and adequate return on our shareholders' investment, and the trust they place in us.

We have confidence in the future, and in the support of our workers and other stakeholders for Cemig to continue to be recognized as: Brazil's Best Energy.

Board of Directors



Sitting Members



JOSÉ AFONSO BICALHO
BELTRÃO DA SILVA

Chair of the Board of
Directors



MAURO BORGES LEMOS

Deputy Chair of the Board of
Directors



ALLAN KARDEC DE MELO
FERREIRA



ARCÂNGELO EUSTÁQUIO
TORRES QUEIROZ



HELVÉCIO MIRANDA
MAGALHÃES



MARCO ANTÔNIO DE
REZENDE TEIXEIRA



MARCO ANTÔNIO SOARES
DA CUNHA CASTELLO
BRANCO



NELSON JOSÉ HUBNER
MOREIRA



GUY MARIA VILLELA
PASCHOAL



EDUARDO BORGES DE
ANDRADE



JOSÉ HENRIQUE MAIA



PAULO ROBERTO RECKZIEGEL GUEDES



RICARDO COUTINHO DE SENA



SAULO ALVES PEREIRA JUNIOR



JOSÉ PAIS RANGEL

Substitute Members

BRUNO WESTIN PRADO SOARES LEAL

SAMY KOPIT MOSKOVITCH

LUIZ GUILHERME PIVA

FRANKLIN MOREIRA GONÇALVES

WIELAND SILBERSCHNEIDER

ANTÔNIO DIRCEU ARAÚJO XAVIER

RICARDO WAGNER RIGHI DE TOLEDO

CARLOS FERNANDO DA SILVEIRA VIANNA

FLÁVIO MIARELLI PIEDADE

TARCÍSIO AUGUSTO CARNEIRO

BRUNO MAGALHÃES MENICUCCI

MARINA ROSENTHAL ROCHA

NEWTON BRANDÃO FERRAZ RAMOS

JOSÉ AUGUSTO GOMES CAMPOS

JOSÉ JOÃO ABDALLA FILHO

Audit Board



Sitting Members



CHARLES CARVALHO GUEDES



EDSON MOURA SOARES



MÁRCIO ALMEIDA DO AMARAL



RONALDO DIAS



BRUNO GONÇALVES
SIQUEIRA

Substitute Members

BRUNO CIRILO
MENDONÇA DE CAMPOS

ARI BARCELOS DA SILVA

ALIOMAR SILVA LIMA

ALEXANDRE PEDERCINI
ISSA

RAFAEL PINTO QUEIROZ
NETO

Executive Board



MAURO BORGES LEMOS

Chief Executive Officer



MATEUS DE MOURA LIMA
GOMES

Deputy CEO



CÉSAR VAZ DE MELO
FERNANDES

Chief Business Development
Officer



MÁRCIO LÚCIO SERRANO

Chief Corporate Management
Officer



EDUARDO LIMA ANDRADE
FERREIRA

Chief Officer for the Gas
Division



RICARDO JOSÉ CHARBEL

Chief Distribution and Sales
Officer



EVANDRO LEITE
VASCONCELOS

Chief Trading Officer



FABIANO MAIA PEREIRA

Chief Finance and Investor
Relations Officer



FRANKLIN MOREIRA
GONÇALVES

Chief Generation and
Transmission Officer



LUIS FERNANDO PAROLI
SANTOS

Chief Institutional Relations
and Communication Officer



RAUL LYCURGO LEITE

Chief Counsel

COMPANY PROFILE

CEMIG

Recognition in 2015

- Listed in the Dow Jones Sustainability Index (DJSI) for the 16th consecutive year.
- 5th consecutive year in the Dow Jones Emerging Markets Index.
- Selected for inclusion in the ICO2 Index, of the *BM&FBovespa*, for the 6th year running.
- Cemig D: First-placed in the category Southeastern Region – over 400,000 consumers, in the *Aneel* Client Satisfaction Index (*IASC*) Awards.
- Transparency Trophy – awarded by the accounting organizations *Anefac*, *Fipecafi*, and *Serasa* – for 12th year running.
- 11th year running in ISE Corporate Sustainability Index (*BM&FBovespa*).
- For the fourth consecutive year, selected by the Carbon Disclosure Project (CDP) as one of the 10 Brazilian companies with the best climate change practices in Latin America.
- Selected as one of the 70 most advanced Emerging Market companies by the criteria of the Euronext Vigeo Emerging 70 index.
- The Cemig Group company *Taesa* (*Transmissora Aliança de Energia Elétrica S.A.*) was chosen as the best company in the Brazilian electricity sector by the '*Valor 1000*' annual publication of *Valor Econômico* newspaper.
- Rated BB+ on the global scale and brAA+ on the Brazilian scale by Standard & Poor's, with outlook stable for both.
- Selected by Sustainalytics (Netherlands).
- Designated 'Prime' by Oekom Research (Germany) for 3rd consecutive year.
- Recognized in the *Aneel IASC* (Residential Consumer Satisfaction Index) awards with first place in the category Best Distributors of the Southeast Region with more than 400,000 consumers; and third place in Companies with more than 500,000 consumer units. Also recognized in the Perceived Quality Satisfaction Index (*ISQP*) of the Brazilian Electricity Distributors' Association (*Abradee*).

Participation in associations

Cemig participates in the following associations:

- *Abradee* (Brazilian Electricity Distributors' Association);
- *Fiemg* (Minas Gerais State Industries' Association);
- *CEBDS* (Brazilian Corporate Council for Sustainable Development).

COMPANY PROFILE

The Cemig Group operates in generation, transmission, distribution and trading of electricity, energy solutions (*Efficientia S.A.*) and distribution of natural gas (*Gasmig*). The Group comprises the holding company itself – Companhia Energética de Minas Gerais – Cemig (Cemig), its wholly-owned subsidiaries Cemig Geração e Transmissão S.A. (Cemig GT) and Cemig Distribuição S.A. (Cemig D) – and other interests, comprising a total of 218 companies, 18 consortia and 2 Equity Investment Funds (*FIPs*), resulting in assets in 23 Brazilian states (including the nation's capital, the Federal District) and in Chile.

For more information on Cemig's interests and businesses please see

http://cemig.infoinvest.com.br/enu/7900/Organograma_31_01_2016_ing.pdf

Cemig also has operations in exploration and distribution of natural gas, and in data transmission (*Cemig Telecom*). With a direct interest of 26.06%, Cemig is part of the controlling stockholding block of distribution utility *Light S.A.*, which serves 31 cities and counties in the state of *Rio de Janeiro*, covering a region with over 11 million consumers. Cemig also has an interest of 43.36% in the transmission company *Transmissora Aliança de Energia Elétrica S.A. (Taesa)*.

Since its growth model envisages increasing use of renewable energy sources, in 2014 Cemig became part of the controlling stockholding block (27.4%) of *Renova*, a leading company in Brazil's wind energy market, which also has investment portfolios in solar and other renewable sources. The main objective in joining the control block of *Renova* was to make that company Cemig's vehicle for expansion in renewable energy sources (separately from its expansion in large hydroelectric generation projects).

This table shows Cemig's stakes in the capital of its main subsidiaries and affiliates:

GENERATION	TRANSMISSION	DISTRIBUTION	GAS	OTHER BUSINESSES
Cemig Geração e Transmissão S.A. 100%	Cemig Geração e Transmissão S.A. 100%	Cemig Distribuição S.A. 100%	Cia de Gás de Minas Gerais (Gasmig) 98.71% VS* 99.57% TS** website link	Axiom Soluções Tecnológicas S.A. 51% Light 49% Cemig website link
Light S.A. 26.06% website link	Transmissora Aliança de Energia Elétrica S.A. (Taesa) 45.74% VS* 43.36% TS** website link	Light S.A. 26.06% website link	Natural gas exploration blocks: 24.5% São Francisco Basin, Recôncavo Bahiano Basin, Potiguar Basin	Efficientia S.A. 100% website link
Norte Energia S.A. (Belo Monte Hydroelectric Plant) 11.69% website link				Cemig Telecom S.A. 100% website link
Santo Antônio 18.05% website link				
Renova Energia S.A. 36.8% VS* 27.35% TS** website link				

*VS – Voting stock **TS – Total of shares



GENERATION	TRANSMISSION	DISTRIBUTION	GAS	TRADING
Installed capacity: 7,800 MW	Total length of lines: 9,748 km	Total length of networks: 494,550 km	1,440 million m ³ of gas sold in 2015	22% market share

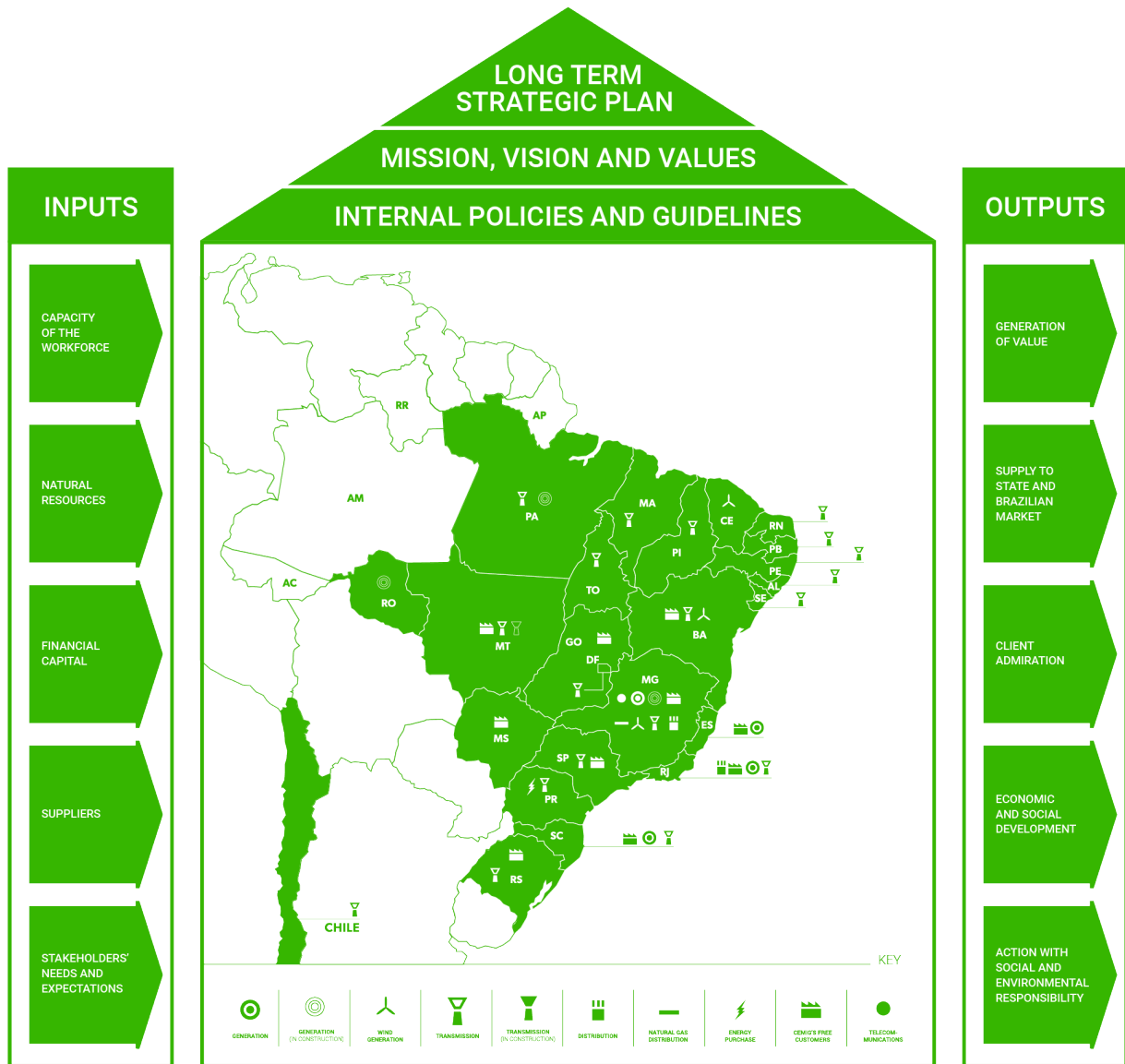
* Cemig consolidated figures, including proportional stakes in controlled companies.

Outstanding assets and inputs contribute to Cemig's leading position as a power company: the technical capacity and quality of its workforce, recognized for its expertise both in Brazil and internationally; its natural resources, mainly water resources (96% of its installed generation capacity is hydroelectric); access to the financial capital it needs for continuous development of its business; the inputs provided by its suppliers; and the consideration that it gives to the needs and expectations of its stakeholders.

In all its activities Cemig seeks to achieve sustainable growth focused on creating value for its shareholders, employees, suppliers and society. Its investments in expansion of its businesses to supply the markets in which it operates, and its commitment to quality customer service, are a physical materialization of its strategic vision, which is based on the principles of sustainability and social and environmental responsibility.

This chart gives an illustration of Cemig's business model:

CORPORATE GOVERNANCE
RISK MANAGEMENT AND OPPORTUNITIES



For more information: <http://ri.cemig.com.br/?idioma=enu>

CEMIG'S MISSION, VISION AND VALUES

Cemig's management is based on the guidelines expressed in the Mission, Vision and Values set out in its Long-Term Strategic Plan, and in its Strategic Planning.

Mission:

"To operate in the energy sector with profitability, quality and social responsibility."

Vision:

"To consolidate Cemig's position, over the course of this decade, as the largest group in the Brazilian electricity sector by market value, with a presence in the gas market, and as a global leader in sustainability, admired by its clients and recognized for its solidity and performance".

The organizational values are the beliefs and attitudes that give personality to the relationship between Cemig and people – nurtured, sustained and expressed by these concepts: Integrity; Ethics; Wealth; Social responsibility; Enthusiasm at work; and

ETHICAL CONDUCT

Cemig publishes its Statement of Ethical Principles and Code of Professional Conduct to all employees through its corporate Intranet, and it is also available on the Web. It contains 11 principles on conduct and ethical values that have become embedded in Cemig's culture. These principles reinforce our corporate governance system and regulate the behavior, actions and professional decisions of employees, managers, directors and members of the Board of Directors and Audit Board, as well as outsourced workers and service providers. The content of the document specifies the additional responsibilities of senior management, including board members, other management levels and employees with respect to ethical principles.

The Company has also developed its own Anti-Fraud Policy, formally establishing that engaging in and/or concealing fraudulent and corrupt activities – in all their forms, including bribery, extortion, graft and money laundering – are unacceptable practices. The Anti-Fraud Policy, approved by the Executive Board, is disclosed to all employees through the firm's corporate Intranet and made available on the Internet. It establishes the responsibilities of the directors, managers and employees of the Company and its subsidiaries. In December 2015 Cemig published an internal magazine on the Intranet, to publicize and clarify the content of the Anti-Fraud Policy, highlighting certain concepts, technologies and practical applications that Cemig has adopted to prevent and combat acts of fraud or corruption.

In 2015 Cemig developed a survey and assessment of the most significant risks of fraud and/or corruption, covering all the business processes of the holding company and of Cemig Distribuição S.A. (Cemig D) and Cemig Geração e Transmissão S.A. (Cemig GT). This study resulted in a Matrix of Risks of this type, with association of internal controls to mitigate those risks, approved by the Board of Directors.

Cemig has a Three-Year Internal Audit Plan, which requires assessment of all business processes at least every three years. The objective is to ensure that procedures continue to be appropriate and fit for purpose, and that there is compliance with all laws, rules, standards and internal procedures. The decisions on which processes and companies will be audited in a year are based on the degree of risk that they represent for the business and for Cemig's financial statements. High-risk processes are prioritized and audited more frequently (usually annually), whereas audits for low-risk processes are scheduled for every three years. Among risk factors evaluated are those related to fraud. Risk factors are reviewed during the audit planning process, aiming to identify any changes that may have taken place, and any new events that might bring elements of uncertainty into any part of the business.

Cemig maintains an internal control system to prevent fraud and corruption, aligned with the requirements of the U.S. Sarbanes-Oxley Act (SOX). Highlights of the control activities that are audited annually are: orientation against unethical practices, corruption and fraud (the Anti-Fraud Policy); the anonymous Intranet Whistleblower's Channel; the Human Resources policies on recruitment and remuneration; the enterprise risk management process; information security procedures; segregation of duties performed manually and those performed by computer systems; limits of autonomy; and internal control system monitoring activities, conducted by the Company's Internal Audit unit.

In 2015, 192 interns attended 'Cemig First Energy' training sessions, at which they are introduced to the Statement of Ethical Principles and Code of Professional Conduct. Cemig also makes an online training page available to all employees on its Intranet, addressing the Company's main concepts and ethical principles. To reinforce dissemination and acceptance of the Principles, all new employees are given the Cemig Statement of Ethical Principles and Code of Professional Conduct in printed form or have it presented to them in the 'Cemig First Energy' session – and, simultaneously with signature of their employment contract or on swearing-in, are required to sign a Solemn Undertaking that they are aware of the Statement and Code and will obey the values and principles contained in them.

In 2015 Cemig made online training on Brazil's Federal Anti-Corruption Law (Law 12,846 of 2013) available to all employees online. A total of 9,781 people have now taken part in this training – 90% of this public; and 100% of all employees in management positions. This law, which took effect in February 2014, specifies administrative and civil liability for legal entities that commit acts against the public administration, domestic or foreign.

All contracts signed between suppliers and Cemig require the supplier to undertake: "to be aware of and comply with the rules specified in Law 12,846 of January 8, 2013 (the 'Anticorruption Law'); to refrain from committing any acts that may tend to harm the public administration, and to denounce any irregularity of which it becomes aware, through the channels made available by Cemig."

GOVERNANCE MODEL AND LEADING PRACTICES

G4-7

Cemig's corporate governance model is based on principles of transparency, equity and accountability, focusing on clear definition of the roles and responsibilities of the Board of Directors and the Executive Board in the formulation, approval and execution of policies and guidelines for managing the company's businesses.

G4-34

The basic value and aim in the Company's continuous quest for sustainable development is balance between the economic, financial, environmental and social aspects of the Group's projects, in a continuing effort to improve the relationship between the Company and its stockholders, clients, employees, society as a whole, and other stakeholders.

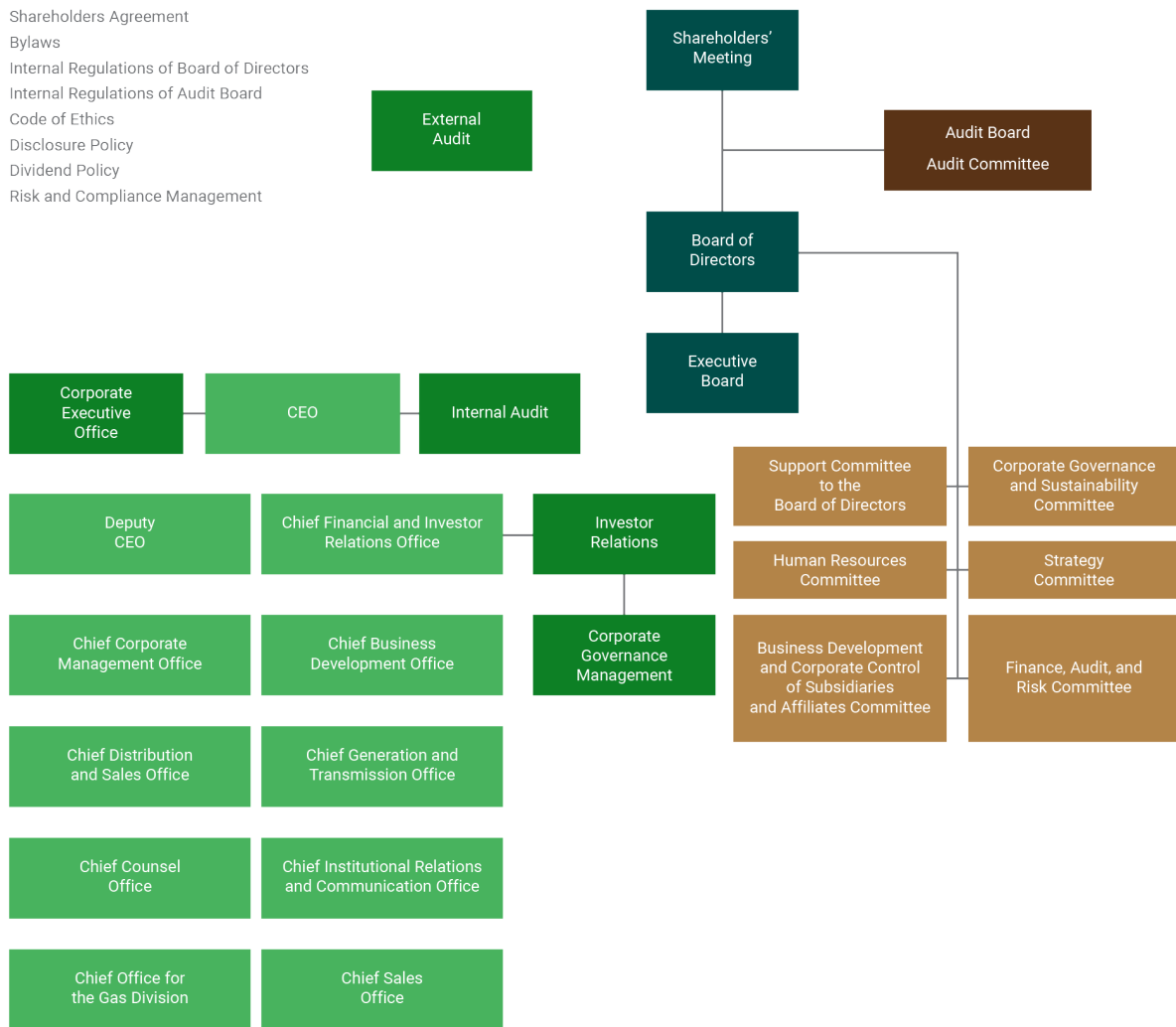
Cemig's principle corporate governance practices can be summed up as:

- Commitment to *Bovespa* Level 1 Corporate Governance
- 50% of the Board members are independent
- Corporate Governance Committee
- Level 2 ADRs on NYSE

Among numerous steps taken to maintain a transparent and well-structured governance model, Cemig adopts the Best Corporate Governance Practices recommendations of the Brazilian Corporate Governance Institute (*IBGC*). They prioritize trust, integrity, and respect for stockholders, investors, clients, employees, suppliers, society and government.

Learn more about Cemig's corporate governance model on the Company's [Investor Relations website](#).

This chart shows the structure and principal mechanisms of Cemig's corporate governance:



Since 2001, Cemig has adopted the Corporate Governance Practices of Level 1 listing on the *São Paulo* Stock Exchange (*BM&FBovespa*). These are listed on the *BM&FBovespa* website.

Cemig is a listed public-private sector company. The controlling stockholder is the State of *Minas Gerais*, which owns 50.96% of the common (voting) shares. The second largest stockholder is *AGC Energia S.A.*, holding 32.96% of the common shares. At the AGM of April 30, 2015, *AGC Energia* nominated five of the 14 elected members of the Board of Directors. The term of office of the directors elected at that meeting expires in April 2016.

Other components of Cemig's corporate governance practices are:

- The Internal Regulations of the Board of Directors
- The Internal Regulations of the Audit Board
- The by-laws, with distinctive structural requirements binding management

Cemig's by-laws establish a distinctive, pro-market dividend policy, as can be seen in the Capital Markets section of this report. Among other subjects, the by-laws:

- require investments to be concentrated in the Company's core business;
- set out senior management's obligations and limits of autonomy, based on the Long-Term Strategic Plan; and
- establish the Company's borrowing limits, thus reducing any insolvency risk

GENERAL MEETINGS OF STOCKHOLDERS

G4-37

In accordance with current law, the Annual General Meeting (AGM) is held each year before the end of April. Extraordinary General Meetings (EGMs) may be held at any time in the year, as necessary. Both are called at least 15 days in advance. Convocation must be published through the CVM, on the Company's Investor Relations website, and in major national newspapers.

The dates of the meetings held in 2015, a summary of their main decisions, and the dates of meetings so far scheduled for 2016, can be found in Cemig's [Corporate Events Calendar](#).

In 2015 four Extraordinary General Meetings of Stockholders were held as well as the mandatory AGM (held on April 30).

Comments, suggestions or recommendations to general meetings may be e-mailed to: ri@cemig.com.br, or made on the Cemig Investor Relations website, <http://ri.cemig.com.br/?idioma=enu>

ADMINISTRATION

G4-35

Cemig's management is exercised by: a Board of Directors; an Executive Board; and a permanent Audit Board. The Board of Directors is elected by the Annual General Meeting of Stockholders. Its members elect their Chair and Vice-Chair, and appoint the Executive Officers – the members of the Executive Board.

G4-40

The Board of Directors consists of 15 sitting members, and their respective substitute members, all elected by the stockholders. They have differing, complementary backgrounds and experience. Of the current sitting members, eight were elected by the controlling stockholder, the State of *Minas Gerais*; five by *AGC Energia S.A.*; and one by the investment fund *FIA Dinâmica Energia*. Minority stockholders of common shares, and the holders of the preferred shares, both have the right to elect one member of the Board of Directors, in separate votes. Four of the present sitting members are considered to be 'independent members' by the criteria of the Brazilian Corporate Governance Institute. All members of the Board of Directors and their substitute members serve for periods of office of two years, which may be renewed on expiration. The periods of office of the present members of the Board of Directors expire at the Annual General Meeting of Stockholders to be held in April 2016.

G4-41

The Board of Directors met 30 times in 2015, making decisions on issues ranging from strategic planning to investment projects. At the start of each meeting, members are invited to indicate whether they have any conflict of interest in relation to the items on the agenda.

G4-51

Information on the composition, election, term of office, principal responsibilities and duties of the Board of Directors are contained in the [Internal Regulations](#) of the Board of Directors.

G4-57

Committees of members of the Board of Directors have been established since 2006: their role is to review and discuss, in advance, matters to be decided by the Board. The [duties of each committee](#) can be seen on the Company's website.

Cemig's Executive Board has 11 members, whose functions are specified in the by-laws. Its members, with the responsibilities of Chief Officers, are elected and may be removed at any time by the Board of Directors. They serve for three-year terms of office, which may be renewed. They may simultaneously hold unremunerated management positions in Cemig's subsidiaries and/or affiliates. The period of office of the present Chief Officers expires at the first meeting of the Board of Directors held after the Annual General Meeting of 2018.

The Executive Board is supported by 35 management committees, two subcommittees and one commission, made up of executives from various areas of the Company. These committees meet whenever activated. Their role is to support the

Executive Board and the Board of Directors with optimum input and analysis when taking decisions.

The members of the Audit Board are also elected by the General Meeting of Stockholders. The Audit Board is established permanently. It is a multidisciplinary body with five members. Their present period of office is until April 2016.

The members of the Audit Board are elected by the stockholders, in the following proportion:

- one member elected by the holders of the preferred shares;
- one member elected by holders of common shares that are not in the controlling stockholding block and which, in aggregate, total at least 10% of the Company's total share capital; and
- three members elected by the controlling stockholder.

The Audit Board has the additional responsibility of reviewing all non-operational complaints forwarded to it by the Ethics Committee. These complaints, made through the 'Whistleblower's Channel' on Cemig's Intranet, are sorted into two categories, operational and non-operational. The Audit Board considers every non-operational complaint, and proposes a course of action to be carried out by the Internal Auditors. Cemig's Audit Board acts as an alternative to the Audit Committee, under the exemption allowed by Rule 10-3A of the Exchange Act, regulated by SEC Release 82-1234. The Audit Board held 13 meetings in 2015.

RISK MANAGEMENT

DMA

Corporate risk Management

G4-2

Corporate risk management is a management tool that is an integral part of Cemig's corporate governance practices. It identifies the events that can affect strategic objectives. The intention is to provide senior management with information for the taking of decisions, thus preserving the Company's value. In this sense, the practice of risk management is a competitive differentiation factor to be used not only defensively, but also as an opportunity for improvement. The structuring and analysis of operations from the point of view of risk management are factors that optimize investment in the control of the activity. They reduce costs, improve performance, and consequently help the Company achieve its targets.

G4-47

Also, the need to put in place certain structural elements of the risk management system is one of the aspects that is evaluated for the Company's inclusion in indices such as the DJSI World and the ISE Corporate Sustainability Index.

Cemig's system of risk management was initially implemented in 2003, and has been constantly improved since then. In a further element of the organizational structure, the Corporate Risk Management Committee (*CMRC*), created in 2012, has the following responsibilities: (i) to propose, for approval by the Executive Board, guidelines, policies and procedures to be adopted in the Corporate Risks Management Process, ensuring continuous improvements of the process, and arranging for it to be disseminated; (ii) to analyze and to propose to the Executive Board priority actions dealing with the risks characterized as 'critical', in the final exposure matrix; and (iii) to submit to the approval of the Executive Board (a) mechanisms to make strategic monitoring operational for the corporate risks identified, and (b) effective actions to reduce, to an acceptable level, financial exposure and impact on intangible assets – while taking account of mitigating plans of action, which must be in line with the Company's Long-term Strategic Plan. The *CMRC* meets every two months.

In 2013 a new technological platform was installed exclusively for risk management – the SAP RM (Risk Management) module. This enabled the process of mapping of risks to take place continuously, since the updating of information, verifications and assessments of the controls and plans of action become scheduled tasks to be executed by the people responsible within the system itself. This results in all the agents involved in risk management having clearly specified roles and responsibilities which can be monitored, using the minimum of human resources for their realization and control. There is also a flow analysis, carried out by an independent group in the Company, for periodic evaluation of the controls to audit the

effectiveness of the process.

In 2015 this platform came into full operation, generating reliable reports and providing perception of relationships between the risks that are mapped.

Several new steps were taken in 2015. The most significant of these include:

- Adjustments in the standard methodology for management of risks (new model for segmentation of risks, method of quantification of impacts, and approach used in raising information, also incorporating the 'Top Down') approach.
- Review and updating of the Risk Management Policy.
- Mapping of the principle corporate risks (Top Risks), and some related to the Cemig Socio-environmental Adaptation Program;
- Approval of the matrix of corporate risks and of the risk appetite assumptions by the Board of Directors.

In the process of the collection of the 'Top Risks' information, a survey was made with the Company's General Managers to establish the principal risk areas to be monitored, such as: loss of concession; degree of indebtedness; liquidity; availability and reliability indicators, and tax economy. This work produced a matrix that is able to make a joint evaluation of impact and probability of a risk event.

In relation to Cemig's Socio-environmental Adaptation Program, risks were identified in connection with use of water, handling of vegetation, fish deaths, environmental accidents with oils/material logistics, compliance with environmental requirements, and other factors. Cemig adopts measures to mitigate and manage exposure that are aligned with the risk appetite assumptions.

In recent years Cemig has also created two Committees that act directly to eliminate or minimize possible impacts of risks affecting Cemig: the Master Risk Management Committee (*CDGR*) and the Emergency Situations Brand Risk Management Committee.

Further, Cemig always considers the precautionary principle in risk management processes, in planning of operations and in development of new business initiatives. During planning, all the factors that might present risks to health and/or safety of employees, suppliers, clients, the general population or the environment are taken into account.

The next steps in the process of risk management involve consolidation of the model, continuous development of the culture among managers, and improvement of the tools for monitoring risks – to ensure further progress.

CEMIG'S STRATEGY

In 2015 Cemig began a review of its strategic planning, in response to numerous adverse macro factors: negative Brazilian GDP growth in 2015, with expectation of further contraction in 2016; high interest rates and high inflation; and the effects of severe water shortages – worsening since they began in late 2013 – affecting the Company's principal business. This process had not been completed by the time of preparation of this report. The Executive Board has held four workshops on this in six months, with the support of analyses by external consultants on the electricity sector, the market and performance, also providing an international perspective on the opportunities and challenges for Cemig's business. Cemig technical staff, analysts and management from numerous areas took part in the meetings, collection of data, and discussions throughout the

process.

The next step is submission of the proposal by the Executive Board to the Board of Directors. Upon approval, the new strategic planning will have various effects in the different areas of the Company, indicating new contributions to be delivered to meet the challenges proposed.

The strategic planning is based on analysis of the Company's major themes and objects. These can be summed up as: (i) Cemig's principal aspirations over time; (ii) the portfolio of businesses – analysis of opportunities and threats; (iii) possible levers for competitiveness – identifying the Company's distinctive competencies, and potential limiting factors; (iv) human capital; (v) resulting effects; and (vi) implementation.

The aim of the strategic planning review is to respond to the critical questions relating to each one of these subjects. Based on this work as a reference, targets and actions will be decided, to be achieved and pursued, thus reflecting the challenges to be overcome starting in the year of 2016.

STRATEGIC OBJECTIVE	MATERIAL ASPECT	TARGET	STATUS	TARGET DATE	GRI INDICATORS
Maximize value for stockholders in a sustainable manner and in compliance with the Long-term Strategic Plan	Economic Performance	To keep the Company's consolidated indebtedness less than or equal to 2 (two) times the Company's Ebitda (profit before interest, taxes, depreciation and amortization)	In accordance with a decision of the General Meeting of Stockholders of December 29, 2015, the Board of Directors authorized that exceptionally in 2015, for reasons relating to a temporary situation, the upper limit for the ratio of net debt to Ebitda could be 2.6. At the end of 2015 net debt was 2.4 times Ebitda for the year, thus within the new limit.	Annual	
		To keep the ratio Consolidated (Net debt) / (Net debt + Stockholders' equity) within an upper limit of 40%.	In accordance with a decision of the General Meeting of Stockholders of December 29, 2015, the Board of Directors authorized that exceptionally in 2015, for reasons relating to a temporary situation, the upper limit for this ratio could be 51%. At the end of 2015, this ratio was 47.5%.	Annual	G4-45, G4-47, G4-14
	Share price	Distribute at least 50% of Net profit as dividends.	The proposed distribution of the net profit for the 2015 business year, subject to the approval of the Annual General Meeting of Stockholders to be held by April 30, 2016, is payment of R\$ 200 million, in two installments (by June 30 and December 30), in the form of Interest on Equity, and R\$ 434 million as dividends for 2015, to be paid by December 30, 2016. Under the proposal, the remaining part of the dividends for 2015, R\$ 634 million, will be held as a reserve for dividends not distributed, to be paid when Cemig's financial situation permits.	Annual	

Increase	Investments for growth	Execute investments of R\$ 1.6 billion in Cemig GT (Generation and Transmission)	R\$ 578.95 million was invested in 2015.	2017	EC1, EC2, EC8, EU26
		Execute investments of R\$ 4.9 billion in	R\$ 1.108 million was invested in 2015.	2017	

cash flow		Cemig D (distribution)				
		To serve 1.2 million new consumers in the urban area	A total of 809,229 new connections have been made.	2017		
	Economic Performance	Increase cash flow: present EBITA of at least R\$ 6.447 million	In 2015, consolidated Ebitda was R\$ 4.955 million.	2017	EC1, EC2, EC8	
Ensure sustainability	Water	Reduce water consumption to 4% less than in 2011	Water consumption is now 56.3% below its level of 2011	2020	EN8, EN9, EN10	
		IEPE – Efficiency Index Energy Planning of Plants – to be above 94%	IEPE was 94.9% in 2015	2015	EN8, EN9	
	Electricity	Reduce electricity consumption to 4% less than in 2011	Electricity consumption is now 5.2% less than in 2011	2020	EN3, EN4, EN5, EN6, EN7	
	Climate change	Reduce the intensity of greenhouse gas emissions, measured in tCO2eq/MWh, to 8% less than their level in 2008	Increased by 11% compared to 2008. This is because Cemig has generated 33,412,535 MWh in 2008 compared to 18,989,539 MWh in 2015	2015	EN15, EN16, EN17, EN18, EN19, EN20, EN21	
		Reduce the direct emissions of greenhouse gases (tCO2eq) by 8%, based on the verified emissions in 2014	Decreased 73.4% compared to emissions in 2014	2021		
	Waste	To have 99% of industrial wastes recycled/regenerated or sold	In 2015, 99.8% of industrial wastes were recycled/regenerated or sold	2020	EN23, EN24	
	Biodiversity		Maximum total affected biomass 1,772 KG	Affected biomass in 2015 was 2,706.2 kg. See more details under Biodiversity.	2017	
			In Conservation of Ecological Processes and Biodiversity: Complete the study of the effectiveness and sustainability of riparian forest at the Volta Grande Hydroelectric Plant, Minas Gerais	Preparation of the study is on schedule	2016	
			Conclude the urban arborization inventory in Belo Horizonte, and insert the product as a routine work planning and programming tool	By December 2015 the inventory contained approximately 290,000 trees. About 190,000 are yet to be included, for completion of the work. (During this work the estimate of the total number of trees to be included in the inventory was revised.)	2017	EN11, EN12, EN13, EU13
			Incorporate the methodology of	The R&D project to prepare the methodology of Integrated Vegetation Management in		

		Integrated Vegetation Management as a standard procedure for opening of low voltage pathways.	transmission line pathways was completed in 2014. Use of the methodology is planned to start in 2Q 2016 (awaiting only permission for use of non-agricultural products).	2017	
	Comply with legislation	Revise the Statement of Ethical Principles and Code of Professional Conduct	A company has been contracted to do this. This will be completed in 2016.	2016	HR3, HR5, HR6
	Communities	Prepare the reduced and simplified version of the Annual and Sustainability Report *	This has been prepared and published to all employees.	2015	HR3, EU24
	Management of suppliers	Contracted Services Quality Index to be above 80% *	It was 67.8% in 2015. The target for 2016 continues to be 80%.	2015 2016	HR1, HR5, HR6
Ensure the quality levels set by the regulator	Electricity quality	SAIDI to be below 10.83 hours	SAIDI was 11.5 hours in 2015, reflecting an increased component of outages due to accidents. Efforts for further progress on programmed outages will be made, to bring the total SAIDI within the target.	2017	EU6, EU29
		SAIFI to be below 7.56	Measured SAIFI was 5.86.	2017	EU6, EU28
	Management of power losses	Target for total losses: below 10.68%	Total losses in 2015 were 11.69%	2017	EU6, EU12
	Clients and consumers	Perceived Quality Satisfaction Index above 82%	This Index in 2015 was 81.3%	2017	PR5
	Employees	Training efficiency index above 95%*	Achieved: 99.8%	2015	LA9, LA10
	Employees	Average time of training per employee to exceed 47 hours *	Below target: 38.18 hours. See details and justification in the item Training	2015	LA9, LA10
	Employees	Carry out training on the new services instruction – Minimal Environmental Requirements *	The training has been developed in distance learning format and is undergoing adjustments. It will be launched in 2016.	2015	LA9, LA10
Establish Safety as a value in the corporate culture	Health and safety	In the quest for Zero Accidents, the TFA workforce accident rate to be less than 2.14. *	In 2015 the TFA workforce accident rate was 2.56.	2015	LA7
			The target for 2016 and 2017 continues to be 2.14.	2016/2017	
To be an innovator in the quest for technological solutions for the business	Innovation	To spend R\$ 290 million in research and development	In 2015 more than 156 projects were in progress for investment of more than R\$ 89 million	2018	EU8
	Innovation	Simultaneous reading and printing of electricity bills for 7 million clients. *	Simultaneous reading and printing of electricity bills in 2015 reached 5 million clients with adjustments in prior years for compatibility with the new criterion – almost 72% of the target.	2016	EU8

* Targets set in 2015 to be met in 2015 or later.

CONCESSIONS

Generation

Provisional Measure 579 of 2012, enacted as Law 12783/2013, subjected **Cemig GT**'s concessions for 15 of its plants to a new remuneration and concessions framework. The basis of the new system was (a) required acceptance of predefined tariffs; and (b) a proposal to indemnify investments made by the concession holder in each plant and not yet amortized. The 15 plants concerned were:

- *Cajuru, Camargos, Gafanhoto, Itutinga, Joasal, Marmelos, Martins, Paciência, Peti, Piau, Salto Grande, Três Marias, Tronqueiras, Dona Rita, Volta Grande.*

At the time, Cemig GT did not accept the terms for renewal.

In November 2015, Cemig GT took part in Auction 12/2015 and won the concessions of Lot D offered in that auction. This was for 18 plants – for five of which the concession had been previously held by *Furnas S.A.* – with total assured average power offtake of 420 MW.

The contract for these plants gives Cemig the concession for their commercial operation for the next 30 years, and requires that: in 2016, 100% of the output is to be sold in the Regulated Market, under the *Sistema de Cota de Garantia Física* or *CGF* (Physical Guarantee Quota System); and as from January 1, 2017, 70% of the output will be sold in the Regulated Market and 30% in the Free Market.

Cemig's offer was: for the price it is to receive as annual payment for running the concession, R\$ 499 thousand; and as the single Fee paid for the grant of the 30-year concession for the 18 hydroelectric plants, R\$ 2.2 million. Of this fee, 65% was paid on January 4, 2016, and the remaining 35% is to be paid within 180 days after signature of the Concession Agreement. The contract was signed on January 5, 2016, at the Mining and Energy Ministry.

There are more details in the Notes to the published Financial Statements (DFP) for 2015, under Generation Concessions.

Transmission

In 2015 there were no material changes affecting the concessions for Cemig GT's transmission lines.

For the older transmission concessions, granted before the year 2000, renewals have been applied for as from January 1, 2013 in accordance with Law 12783, under which the assets are the property of the concession-granting power. As from 2013 the company has the right to revenue for the operation and maintenance of these assets.

There are more details under Transmission Concessions in the notes to the published Financial Statements (DFP) for 2015.

Distribution

The expiration date of Cemig D's four distribution concession contracts is February 18, 2016. The rules for renewal of the concession were regulated by Law 12783 of 2013, in which Article 7 specifies that electricity distribution concessions covered by Article 22 of Law 9074 of 1995 may be extended, at the option of the grantor power, for a single time, for a period of up to 30 years.

Within the process of extension of the distribution concessions, the government published Decree 8461 on June 2, 2015, governing extension of the distribution concessions. The Decree states that extensions will be granted with a view to meeting efficiency criteria, related to: (i) quality of the service provided; (ii) economic and financial management; (iii) operational and economic rationality; and (iv) minimal tariffs.

Aneel was given the responsibility of creating the draft of the contract, or of an Amendment. On June 10, 2015, Aneel opened

Public Hearing 038/2015, to obtain inputs for improvement of the model of an amendment to the concession contract for extension of the electricity distribution concessions.

Under the amendment to the concession contract, extension of the right to commercial operation of the concession is made conditional upon meeting certain quality and sustainability indices, as well as reasonableness of tariffs.

On the subject of quality indicators, Sub-clause 8 of Clause 2 of the amendment lays down that non-compliance with the annual global targets for the collective continuity indicators for two consecutive years, or in three years of any five, may result in limitations being imposed on distribution of dividends or on payment of Interest on Equity to stockholders, until the regulatory parameters are restored; and further, that Sub-clause 8 will apply if there is any non-compliance with the quality indicators in any one of the five final years of the contract. The required Standard of Efficiency in relation to economic and financial management is defined, for succeeding years, as follows:

$$\frac{\text{Net Debt}}{\text{Adjusted Ebitda} - \text{Investment in replacement}} \leq \frac{1}{1,11 \times \text{Selic}}$$

Where:

Adjusted Ebitda: Earnings before interest, tax, depreciation and amortization adjusted for non-recurring events.

Investment in replacement: *Quota de Reintegração Regulatória - QRR* (The Regulatory Replacement Quota).

Selic: Brazilian official interest rate.

This formula aims to reflect to what extent (by what multiple) the Company's debt (long and short term), net of cash and cash equivalents, is greater than the annual cash flow from the activity, less its regulatory level of investment.

Non-compliance with the minimum condition of sustainability will result in a limitation being placed, under the contract, on distribution of dividends to a ceiling of 25% of the adjusted profit, acceptance of a restrictive regime of contracts with related parties, and requirement for injection of funds from the stockholders' own capital.

To help companies adapt to the rules, the first five years starting with the calendar year subsequent to the start date of the amendment to the concession contract are defined as a transition period for adaptation to the minimal sustainability condition. The sustainability index described in Clause 7 of the concession contract amendment will be required to be complied with in full only in the fifth year following the year in which the amendment comes into effect. In the years 2017–19 the index is staggered so that each year the minimum requirement becomes closer to the index required at the end of 2020.

As well as the definition of these quality and sustainability indices, the new amendment introduced changes for the tariff-setting process. The first change is in the date the adjustment takes effect: this will be May 28 each year, starting in 2016. The second change is a new way of calculating reasonableness of tariffs, coverage of regulatory default, and calculation of 'Portion B'. There are three principal changes:

- The regulatory default level is now to be treated within Portion A, together with the other non-manageable costs.
- The deduction of other revenues will be made annually at each tariff adjustment, and no longer only at the Tariff Reviews.
- Portion B will be calculated by applying the tariff currently in effect to the 'Reference Market' – rather than the expression used in the previous contract, in which Portion B was calculated as the difference between Actual Revenue

and Portion A.

The method of tariff calculation under the former concession contract will remain in effect in 2016; the new tariff calculation rules will come into effect with the second tariff adjustment after signature of the contract.

INVESTMENTS IN GENERATION, TRANSMISSION AND DISTRIBUTION

DMA

The targets for the growth of the Cemig Group, and also the strategies used to achieve them, are decided on the basis of the Long-term Strategic Plan – the document that orients the whole of Cemig’s business (currently for the period 2005-2035). One of the strategic directives of Cemig is sustainable growth, focused on growth in generation of electricity from renewable sources.

EU6

Cemig adopts a structure of acquisitions by the making of partnerships with investment funds and strategic partners, establishing a vehicle for growth which enables the Company, even while holding a minority stake, to assume a strategic and competitive position in those assets, associating its expertise with the financial capacity of the partners.

EU10

In the processes of mergers and acquisitions that Cemig has undertaken, due diligence to evaluate, identify, measure and decide how to treat each risk or contingency is vital. This is a multidisciplinary activity, involving skills from a wide range of areas: technical, environmental and legal knowledge and experience; experience in corporate stockholding transactions; knowledge and experience also in regulations, real estate, accounting, tax, employment law and finance. Thus due diligence is a tool of fundamental importance in relation to investment as the growth strategy adopted by the Company.

G4-EC7

To ensure the sustainability and continuity of its businesses and their continuing success in the market, and the reliability and availability of electricity supplied to clients and consumers, Cemig monitors its equity interests, supervising management and the activities and development of subsidiaries and affiliated companies, through active participation in their management bodies, adherence to good corporate governance practices, and taking action at all times for compliance with its business plan and for optimum planning of the investment program. Below we describe Cemig’s principal stockholding interests and some of the key points about them.

Belo Monte

The *Belo Monte* Hydroelectric Plant, managed by Norte Energia S.A., in which Cemig owns an equity interest of 11.69%, is on the Xingu River, close to the cities of *Altamira* and *Vitória do Xingu*, in the Northern Brazilian state of *Pará*. At the end of 2015 construction was 82% completed.

Belo Monte has two machine rooms: the principal machine room, with generation capacity of approximately 11,000 MW; and an auxiliary unit, with capacity of approximately 233 MW. *Belo Monte* will provide Brazil with 8.7% of its total installed electricity generation capacity. It will be the largest entirely Brazilian hydroelectric plant, and the fourth largest in the world, after Three Gorges (22,000 MW) and Xilodu (13,860 MW) in China, and *taipu* (14,000 MW), jointly owned by Brazil and Paraguay. Total investment in the project will be R\$ 25.8 billion (in April 2010 currency), including R\$ 3.7 billion in compensatory social action.

The first generating units will start commercial operation in the first half of 2016. The first unit of the principal machine room is scheduled to start generating at the end of March, adding 593 MW average to the total assured offtake level of the Brazilian Grid.

Santo Antônio

The *Santo Antônio* Hydroelectric plant had 35 rotors in operation at the end of 2015. Together they represent generation capacity of approximately 2,495 MW. The plant brought three new rotors into operation during the year. In November 2016, when the plant is completed and operating at full capacity, it will have 50 rotors operating, increasing its generation capacity to 3,568 MW. The plant currently employs 457 people, and will represent an investment of more than R\$ 20 billion.

The International Hydropower Association (IHA), a non-profit entity founded some 20 years ago with Unesco support, which measures the sustainability of hydropower projects, gave the *Santo Antônio* Plant the greatest number of top grades in its Implementation category. Its evaluations are based on four project protocol models: early stage; preparation; implementation; and operation. The *Santo Antônio* facility was included in the implementation protocol following analysis of 20 topics, with analysis under various headings – evaluation, management, stakeholder communications, stakeholder support, consent, compliance and results. All the topics require technical documentation, internal and external interviews, and proof of the evidence of sustainability. This assessment underlines the commitment of the *Santo Antônio* Hydroelectric Plant to best global sustainability practices.

Guanhães Energia

Guanhães Energia S.A. is a special-purpose company, created to build four Small Hydro Plants: *Dores de Guanhões*, *Senhora do Porto*, *Jacaré* and *Fortuna II*, in Minas Gerais State, with total installed capacity of 44 MW. Its stockholders are Light Energia S.A., with 51%, and Cemig GT, with 49%.

In August 2015 the four wholly-owned subsidiaries of *Guanhães Energia*, all holders of authorizations to build and operate Small Hydro Plants (SHPs), won the A-3 'New-build' auction, No. 04/15, held by *Aneel*. This gives them the right to sign contracts for electricity supply at higher prices than those currently practiced, and also guarantees predictable revenues up to the end of the period of concession for all the SHPs.

Cemig GT won the bidding for *Aneel's* Lot D, comprising 18 hydroelectric plants, in the auction held on November 25, 2015, on the Bovespa exchange in *São Paulo*. The Company will pay R\$ 2.26 billion over the coming months, for the purchase of the concession. Three other competitors were registered to bid for the same lot, but did not present bids to the auction committee.

Cemig CEO Mauro Borges commented that winning this auction "enables the Company once again to plan its future securely, both in terms of consolidating its position as Brazil's largest integrated electricity company, and also in terms of going forward to new technological frontiers of the electricity sector, inside and outside Brazil."

The plants for which Cemig won the bid include some that are landmarks of the Company's own history, such as *Três Marias*, *Itutinga* and *Salto Grande*. *Três Marias* was a landmark in Brazilian engineering, since its construction, in the 1960s, enabled Brazil to acquire know-how for construction of major electricity generating dams. *Salto Grande* generated the electricity that enabled the major steel complexes of the 'Steel Valley' Region (*Vale do Aço*) to establish themselves there.

Of the 18 plants in this bid, 14 were already operated by Cemig, but Cemig's concession from the federal government had expired. Further to these, Cemig also won four new hydroelectric plants: *Ervália*, *Coronel Domiciano*, *Sinceridade* and *Neblina*. The new assets add just under 50 MW to Cemig GT's total generation capacity. The total generated by the 18 plants is approximately 700 MW.

For Cemig, winning this auction is vital, since electricity generation is an important part of its profit. Generation provided 81.2% of the Company's profit in the third quarter of 2015. This group of concessions guarantees Cemig revenue of R\$ 500 million per year, in cash, for the next 30 years.

For more information, see:

http://cemig.infoinvest.com.br/enu/13008/Fato%20Relevante_LEILAO%20DAS%20CONCESSOES%20012_2015_ing.pdf

Light

Light Distribution

The greatest challenge faced by Light in 2015 was meeting the *Aneel* targets for SAIDI and SAIFI – the two service quality indicators that measure duration and frequency of outages in electricity supply. For the frequency measure – SAIFI – which is directly linked to the maintenance plan, Light succeeded in returning a result lower than the regulatory limit established by Aneel, for the second year running.

Light made progress with its Smart Grid project, beginning implementation of the communications network and its integration with existing systems. Local studies were also made (technology, integration, suppliers, costs/benefit, impact on the operational processes) for: (i) automatic re-establishment ('self-healing' of the network); (ii) management of public lighting; and (iii) integration of distributed generation.

Following the logic of previous years, in 2015 Light maintained a focus on management of electricity losses. A key development was the modernization of metering, with installation of electronic metering and regularization of irregular and defaulting clients. At the individual client level, more than 190,000 electronic meters were installed, bringing the total number of remotely-measured metered clients to 800,000. More than 130,000 inspections were made, and 50,000 client situations normalized.

In 2015 Light increased its capacity for online service to its clients. Its *Virtual Attendant* project increased its capacity for dealing with client needs by online chat, extending service hours, improving indicators and reducing intervention by the staff. On the "Complain Here" (*Reclame Aqui*) website, Light earned the RA 1000 Seal, as best electricity sector company in all performance indicators.

At the beginning of the year Light launched the second stage of the "For a Lighter Bill" (*Por uma Conta Mais Light*) campaign, coinciding with the arrival of summer. The aim was to raise popular awareness on responsible electricity consumption, and also to reinforce Light's strategy in combating losses and default.

The Olympic and Paralympic Games: Light began, at the start of 2015, implementing its plans for operation, maintenance and communication for the Olympic and the Paralympic Games to take place in Brazil in 2016.

A workshop was held at the company in March 2015 for transfer of experience from UPKN (the company responsible for electricity distribution at the London Olympics of 2012) to the teams that are involved from Light, Eletrobras Furnas, the National Electricity System Operator (ONS), the Mining and Energy Ministry (MME), the APO (Brazil's Olympic Public Authority), and the Organizing committee of the 2016 Rio de Janeiro Olympic and Paralympic Games. Throughout 2015, the Company was reporting to Aneel on progress on the maintenance plan, and to the ONS on the progress of Light's operational plans.

One highlight is the conclusion of the Olympic Substation, under a commitment agreed between the Brazilian government and the International Olympic Committee, specified in the contract with the Mining and Energy Ministry. In January 2014 a special-purpose company was created for its construction: Energia Olímpica S.A., owned 50.1% by Light S.A. and 49.9% by Eletrobras Furnas.

Light: Generation

In generation, an outstanding project is the plan for construction of the *Lajes* Small Hydro Plant (SHP), a generator with installed capacity of 70 MW, for investment of approximately R\$ 70 million.

The project will not involve any formation of reservoirs, dykes or dams, but will consist of construction of a new water channel from the Valves Chamber, and installation of a new generating unit in the existing Machine Room. As well as electricity generation, this SHP will bring a significant new benefit to the water supply system of Greater Rio de Janeiro, by significantly improving the reliability and operational flexibility of the *Lajes* water complex.

In the first half of 2015 the Mining and Energy Ministry approved the Ministerial Order which included the *Lajes* SHP under the benefit of the Infrastructure Development Incentives Scheme (REIDI). In the second half of the year the *BNDES* (Brazilian National Bank for Socioeconomic Development) approved the financing of the project. The contract is at signature stage with the funding timetabled for release in 2016. Operational start-up is planned for third quarter 2016.

Renova

In 2015 *Renova* continued its strategy of placing contracts for, building, and operating reviewable energy projects.

The first major wind farm projects that *Renova* built both completed one year of operation in 2015. The operational data on these two wind power complexes, even in this short initial period, proved the quality of the winds in the region, and the correctness of the strategy of building them.

Also in 2015 four wind farms (of a total of nine) that placed their supply in the 2011 power auction also began commercial operation. The *Ametista*, *Pilões*, *Maron* and *Dourados* plants, with installed capacity of 117.6 MW, were connected to the same transmission line that serves the *Igaporã II* wind farms. The other five wind farms were connected to the *Igaporã III* line, coming into operation on January 1, 2016.

In May 2015, *Renova* announced a transaction with TerraForm Global, involving the transfer of certain operational assets. The objective of the transaction was to increase *Renova's* competitiveness, generation of value, and capacity to grow. There are more details in Note 14 to the Cemig 2015 Financial Statements.

New contract: In August 2015 the consortium formed by *Renova*, *SunEdison Brasil Energia Ltda* and *Sune Solar B.V.*, in which *Renova* holds a 50% stake, placed contracted supply of 15.0 MW average in the 2015 Reserve Energy Auction for solar supply (the 2015 LER solar auction) – corresponding to 59.7 MW of installed solar power capacity.

Renova continued with the construction of Phase A of its *Alto Sertão III* complex, which has installed capacity of 411.1 MW, and delivery scheduled for dates in 2016 and early 2017.

For more information, see: http://cemig.infoinvest.com.br/enu/13031/Fato%20Relevante_Renova_Sun_canc_fasII_ing.pdf

Project: Expansion of Small Hydro Plants

This is a strategic initiative of Cemig aiming to increase the total installed generating capacity, and output, of its small hydro plants, based on better use of hydroelectric potential. The Company approved plans to expand three plants in November 2014: *Salto do Paraopeba*, belonging to *Horizontes Energia S.A.*; *Poço Fundo*, belonging to Cemig GT; and *Paraúna*, belonging to the federal government and under administration by Cemig GT. In 2015 studies were begun for contracting of the works, and analyses of further plants to be amplified.

Although they provide less power than the large hydroelectric plants, investments in SHPs are justified by the smaller

environmental impact arising from relatively smaller reservoirs, and their lower operational costs.

Aliança

On February 27, 2015, completion took place of the transaction of association between *Vale S.A.* ('Vale') and Cemig GT, through injection of assets into *Aliança Geração de Energia S.A.* ('Aliança'), of the equity interests held by Vale and Cemig GT in the following generation assets: *Porto Estrela*, *Igarapava*, *Funil*, *Aimorés*, *Capim Branco I* and *II* (assets arising from the company *Capim Branco S.A.* and transferred from the Cemig parent company to Cemig GT), and *Candongá* (a project owned only by Vale).

Vale and Cemig GT hold, respectively, 55% and 45% of the total capital, exercising joint control of the company. Conclusion of the transaction involved no financial disbursement: both companies subscribed assets.

As well as being a platform for consolidation of generation assets of the two companies in generation consortia, there is provision for investments in future electricity generation projects.

Gasmig

2015 was a year of significant changes, and especially challenges, for Gasmig, which increased its client base by 131.09%, from 1,824 consumer units, in 2014, to 4,215 in 2015.

In 2015 Gasmig invested R\$ 43.6 million in expansion of its Natural Gas Distribution Networks in the State of Minas Gerais, with construction of 51.4 km of gas pipelines in Greater *Belo Horizonte*, the South of *Minas Gerais* State and *Juiz de Fora* City, to serve commercial and industrial consumers.

To serve the market segment of urban residential clients, Gasmig continued with its "Anel Sul" (South Ring) Project, concluding the 18-kilometer "Anel de aço" (Steel Ring) and also extending and increasing the density of the distribution network in some districts of *Belo Horizonte* and *Nova Lima*.

Continuing its installation of residential distribution in *Belo Horizonte*, Gasmig applied for the Operational License for 700 meters of steel gas pipeline, to link the ring that feeds the natural gas distribution network in the city districts of *Funcionários*, *São Pedro*, *Carmo*, and *Sion*, and the parts of the pipeline in *Betânia*, *Buritiz* and as far as *Belvedere*. This concession will give more reliability to distribution in the districts of the Southern Region of *Belo Horizonte* and in the two regions of *Nova Lima*, covering a region to the south of the city which has a high concentration of commercial buildings and clients.

Gasmig was granted the Environmental Operation Authorizations (AAFs) for the *Canaã-Barreiro* Lateral Line (*Sete Lagoas* City), for the *São Francisco* Viaduct Overhaul (*Belo Horizonte* City) and for hazardous product highway transport (for its plan to expand the natural gas distribution networks). For continuity in its network operation, Gasmig was granted further AAFs for its network in *Pouso Alegre* (the *Pouso Alegre* District Lateral Line), and formalized its application to the environmental authority for revalidations of the Operation Licenses for the first phase of the *Sul de Minas* Gas Distribution Network, and its Natural Gas Distribution Network for the Central Region of *Minas Gerais*.

In the revalidation of Operation Licenses for the *Sul de Minas* first phase network, all the operation licenses will be integrated into one, by Delivery Point, optimizing the process of meeting the requirements for each License, and costs and deadlines for the analysis processes.

Taesa

Transmissora Aliança de Energia Elétrica S.A. – Taesa is an unlisted company controlled by Cemig, which holds 45.74% of the

voting capital and 43.36% of the total capital, and by the investment fund FIP Coliseu. *Taes*a has been the growth vehicle for Cemig in the transmission segment, in the activities of building, operation and maintenance of transmission lines in all regions of Brazil.

The concessions ESDE and ETSE became 100% operational in 2015. Strengthened facilities also came into operation in the *TSN*, *Patesa* and *Transirapé* transmission lines, and there was construction strengthening in the ETAU and STC concessions. *Taes*a analyzed the lots on offer in the transmission auctions of the period, but did not acquire any new projects.

*Taes*a continues to have a solid position in the market. Over the year of 2015 it invested R\$ 1.6 million in the environmental education program, reaching 17,981 people during the year, including landowners, teachers, pupils, and residents neighboring *Taes*a's projects in the states of *São Paulo*, *Rio Grande do Sul*, *Goiás*, *Tocantins*, *Pernambuco*, *Piauí*, *Bahia* and *Rio Grande do Norte*. *Taes*a also sponsored two environmental education projects, under the Rouanet sponsorship support law: the "Economizando Água" (Saving Water) project, in the interior of *São Paulo* State, given to five schools, reaching 2,515 pupils and 96 teachers; and the project "Educação Ambiental" (Environmental Education), in the state of *Maranhão*, to three public schools with 1,905 pupils, and teachers of the schools. These projects presented principles of education and sustainability, through raising awareness on the importance of preservation of the environment.

Cemig D: The Distribution Development Plan (PDD)

This plan aims to increase the availability of electricity with the continuity, quality, safety and quantity required by clients, promoting social and economic development in Cemig D's concession area, through necessary investments in electricity assets for transport of power supply.

The program comprises projects in high, medium and low voltage associated with expansion, strengthening, overhaul and renewal of Cemig D's assets. These works include: building and expansion of substations; expansion, strengthening and overhaul of high, medium and low voltage distribution lines; and replacement and installation of equipment in substations and distribution lines at medium voltage.

The five-year investment cycle (in accordance with requirement of the regulations) is for the period 2013–2017. Cemig has approved expenditure of more than R\$ 3.74 billion for the period, distributed between the following macro projects:

- High voltage: expansion and strengthening.
- Service to consumers and user access (Cemig contribution).
- High voltage system overhauls.
- High voltage operation and maintenance.
- Medium and low voltage service to the urban market.
- Medium and low voltage service to the rural market.
- Low and high voltage Complementary Program (Cemig contribution).
- Third party safety (Cemig contribution).
- Overhaul and improvements to medium and low voltage networks.
- Medium and low voltage operation and maintenance.
- Change of metering/frontier metering.
- Environment
- Telecoms

These investments will achieve: sustainability for the distribution business; optimizing of value for stockholders, with profitability and cash flow; satisfaction for clients due to continuous supply at higher levels of efficiency; compliance with the quality requirements set by the regulator; reduction of losses; and, overall, availability of electricity for the market with safety

and quality, within the environmental requirements. Clear evidence of this can be seen in the improvement of the various indicators: Client Satisfaction, Supply Quality, and Reduction of Losses.

CLIENT INCLUSION INITIATIVES

EU26

Following publication of Aneel Resolution 488 of May 15, 2012, Cemig prepared its *Rural Universalization Plan*, to supply those beneficiaries who are registered to receive electricity supply in remote rural locations in its concession area, for completion over the period 2012–2014. Based on its inspection in August 2015, Aneel considered the targets stipulated for 2014 to have been met. Under Resolution 563 of 2013, Cemig had applied for extension of its Universalization Plan to a date in 2016. Aneel refused this application and maintained the deadline of December 31, 2014.

The Rural Consumers Service Index achieved by Cemig in 2015 was 95.5%. There is still a market of 4.5% to be served, as a result of the natural growth of the consumer base in recent years, partly as a result of subdivision of rural properties, and partly due to increased rural economic activity, with a consequent increase in that consumer population.

The following are Cemig's principal initiatives in expansion of access to supply:

Rural electrification program

After the "*Luz para Todos*" (Light for Everyone) program completed in 2011 in Minas Gerais, which had federal subsidy support, Cemig D continued to add new access points for consumers in the country districts, with its own funds.

Complying with *Aneel* Resolution 414, Cemig's Rural Universalization Program, being executed since 2012, provides supply to one access point per property without charge to clients, provided that the request for new connection or increased load has installed power of up to 50 kW at voltage lower than 2.3 kV. The applicant has to present the full documentation of proof necessary to complete the application, and this can be done through Cemig D's service channels.

In 2015 Cemig executed approximately 10,000 of these 'universalization' connections, representing investment of approximately R\$ 109 million.

Brand and Reputation

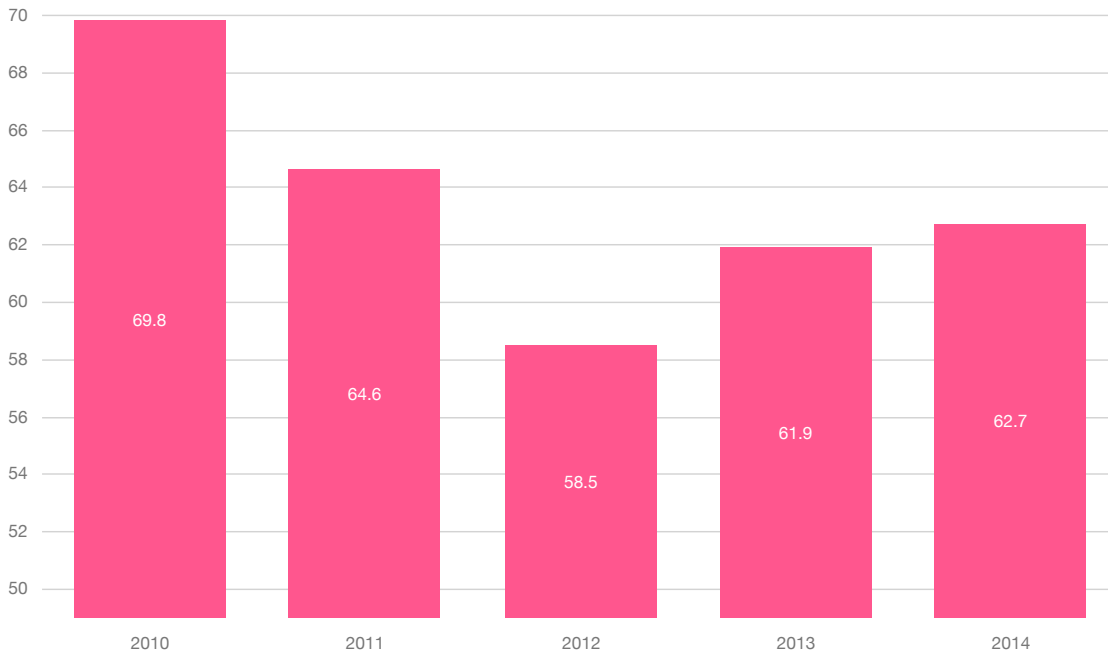
Cemig has been assessing the value of its brand and its reputation since 2007. Following the decision to make this valuation every alternate year, the next will take place in 2016. Cemig's aim is to have an increasingly strong brand and an increasingly positive reputation.

The valuation of the brand is carried out by external consultants. In 2014, the most recent survey, the value of the Cemig brand was estimated at R\$ 1.522 billion – an indication of the brand's strength, which in turn can be attributed to its relationship with its clients and investors.

The Reputation Institute, a company contracted by Cemig, uses the RepTrak™ Deep Dive methodology to evaluate the degree of respect, admiration, confidence and empathy expressed by the public in relation to the Company, forming the Pulse Score, an overall index of reputation. This evaluation also takes place in alternate years. In 2014 Cemig's Pulse Score was 62.7, an increase from 61.9 in the previous valuation.

Cemig formed its Brand and Reputation Management Committee, comprising representatives from all the Director-level Departments, in 2011. The aim of this is to decide on action to improve the Company's performance, strengthen the brand and make Cemig's reputation even more positive.

The Pulse Index



INNOVATION

DMA
GC 9 One of Cemig's strategic objectives is expressed in its continuing quest for innovation. Cemig sees its continuing research to create technological solutions for its businesses as a means of sustaining its future over the long term. Its main instruments for innovation are the *Research and Development Program*, and the *Energy Alternatives* projects, described below.

R&D Projects

EN7
EU7 For Cemig, technology is a factor for development of its business and for addition of value to its products and services. One of the strategies adopted to ensure constant technological updating and incentive for innovation takes the form of partnerships and exchange programs with universities, research centers and companies interested in promoting and participating in the development and consolidation of technological excellence in the state of *Minas Gerais*.

EU8
G4-EC2 Through its Strategic Technology Management – which aims to formulate technological strategies aligned with the corporate guidelines – Cemig seeks to ensure use of the most appropriate technologies, and the most agile responses to changes in scenarios, preparing itself for the frequent changes in a dynamic and competitive market.

G4-EC4 Through its Research and Development Program Cemig generates new processes, methodologies, software programs, materials, devices and equipment to improve the electricity system, the operational process, and personal and property safety – benefiting the sector, Cemig and society as a whole.

In 2015 Cemig invested R\$ 30 million in its R&D program, equivalent to 0.14% of its net operational revenue. Over the last 16 years, it has invested in more than 490 R&D projects (156 in progress in 2015), in various areas of research. Solutions are developed for problems raised, which may involve everything from engineering to challenges related to the environment, energy efficiency, operational efficiency and alternative energy sources.

Cemig uses a metric, named INOV, to measure its efforts in innovation: The total value of investments in R&D projects and other investments in innovation in the year, as a proportion of net operational revenue.

In its continuous work to protect and uphold the Company's intellectual and industrial property, Cemig's Brands and Patents

Department centralizes action for obtaining intellectual property title to brands, patents and computer programs. As well as promoting the Company's image and the increased efficiency in work resulting from the more appropriate technologies developed, the benefits of patenting include the potential sale of an invention, and the stimulus to creativity. Cemig has more patents deposited with the Brazilian Industrial Property Institute (INPI) than any other Brazilian concession holder – a total of 65 patents deposited since 1992. It has 13 patents granted, and deposited a further nine applications in 2015.

So far, Cemig's patents have not produced financial gains or royalties, but their exclusive use gives Cemig a competitive advantage over competitors. They relate mainly to work safety and operational efficiency – producing tangible improvements in productivity.

Main R&D projects developed in 2015

■ Use of the Ecological Integrity Index to classify quality of aquatic environments in Minas Gerais.

This project is an opportunity to meet the needs of the electricity sector. It will make it possible to improve methodologies using new integrative knowledge that is emerging in the field of management of aquatic environments, with the following aims: 1. To identify the aquatic eco-regions and sub-eco regions of *Minas Gerais* to classify lotic environments and the reservoirs for production of electricity, in the State. 2. To study selected reservoirs and their catchment basins for three types of evaluation: (i) characterization of the biological community; (ii) eco-morphological habitat conditions; and (iii) physical and chemical conditions of the waters. 3. To validate the classification of the reservoirs and the river environments of their catchment basins, based on biological indicators. 4. To establish the levels of ecological quality of the aquatic environments selected, based on the index of ecological integrity, and to represent them spatially.

■ Development of an explanatory methodology and model for analysis and treatment of cases of employee absenteeism in the electricity sector, researching elements that could reduce and mitigate these indices, aiming for improved performance and productivity.

This study aims (i) to assess possible relationships between absenteeism and other processes, such as: climate research, performance management, work safety, health and well-being, and to create inputs for discussion with the National Social Security Institute as to any employment-related connection with related illnesses; (ii) to identify causes of seasonality in absenteeism; (iii) to assess relationships between occurrences of illnesses and social factors such as climate, performance, workload, and relationship with line management, based on the International Classification of Diseases (ICD); and (iv) to propose a model that could relate factors causing absenteeism to its seasonal nature and how these affect employees' performance. Finally, it will aim to propose actions to mitigate absenteeism in a company of the electricity sector.

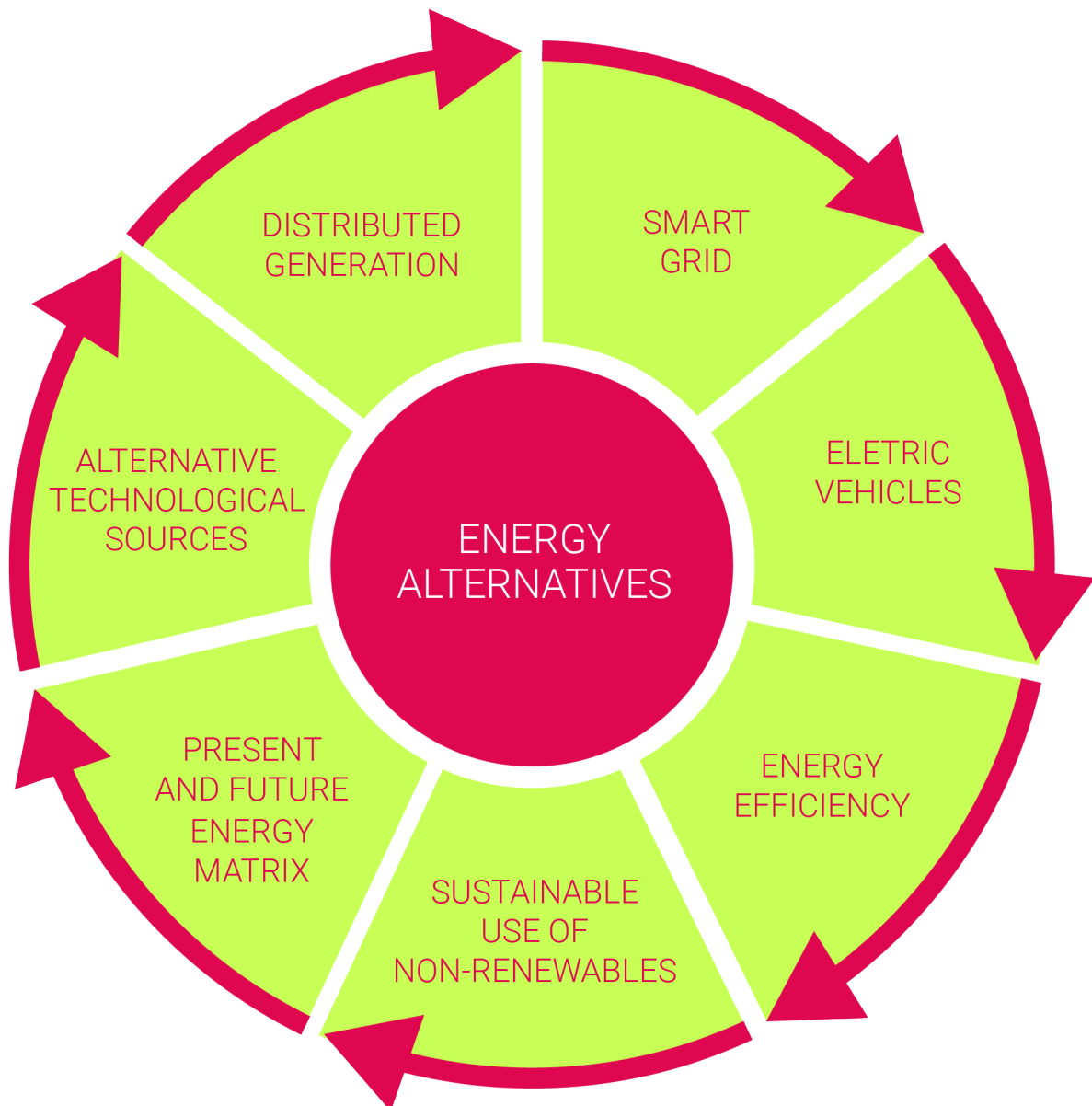
■ Implementation of the Cemig-SIG Corporate Geoportal based on spatial data infrastructure (SDI)

The proposal for spatial data infrastructure (SDI) arose in large government organizations that had difficulty in sharing and accessing spatial data, and because of its high cost. SDI was treated as a priority due to the importance of geographical information for analyses and decision-making. Early initiatives were not successful due to the lack of technological maturity. Recently, this situation has changed due to the interoperability of spatial data of the Open Geospatial Consortium (OGC), ISO spatial metadata standards, and the advance in information technology (web services, cloud, etc.). These advances have made possible a vast environment of innovations, as witness the technical events and scientific conferences on this subject. The large electricity companies have similar problems and needs, and can have the same benefits. Examples of successful implementation are the SDIs of Europe (*Inspire*), the US, and, in Brazil, INDE.

Application of SDI standards and technologies is something new in the Brazilian electricity sector. It was initially developed for governments, and electricity companies find a demand for it in relation to changes, extensions and innovations in their facilities. SDI initiatives are complex projects, with wide scope and involving multiple disciplines. This study focuses on: proposal of standards for subjects, metadata and architecture for the context of generation, transmission and distribution; development of tools to handle geospatial metadata and specific services of electricity companies; sharing of georeferenced data with companies of the Cemig Group; and sharing of georeferenced data of the Cemig SDI with other SDIs (IEDE-MG, INDE).

Energy alternatives

DMA In Cemig's view, the phrase 'Energy Alternatives' covers the whole of the energy chain, including transport, transformation, technological pathways, supply and storage, energy efficiency and final use. The concept includes the following – all integrated and mutually dependent elements in the energy matrix: new sources and technologies; distributed generation; the smart grid concept; electric vehicles; electricity efficiency; and better use of traditional energy resources. These aspects intercommunicate:



Energy alternatives are intrinsically associated with the subjects of technology, innovation and sustainability. Cemig regards its investments in applied research in this sector as essential – for example, for it to continue to be included in the Dow Jones

Sustainability Index (as it has been for more than 16 years) and also for it to directly and decisively strengthen certain processes that are part of its corporate strategic map.

In energy in general, Cemig monitors the state of the art in technology, and channels efforts into development of new technological pathways and business options. Due to its expertise on the subject Cemig is part of committees and groups such as: The Energy Committee of *Fiemg* (the *Minas Gerais* Industries Federation); the State Biodiesel Policy Committee; the Belo Horizonte Municipal Committee on Climate Change and Eco-efficiency; and the *Minas Gerais* Joint State Energy Plan Development Group with the State's Environmental Foundation (*Feam*) and Sustainable Development Department (*Semad*).

This table gives an idea of potential impacts:



The operational indicators adopted by Cemig for assessing the efficacy of the related processes are connected with the following aspects:

- balance on the account of the R&D program in relation to the legal obligation of the last 24 months;
- innovative intensity or effort, measured by expenditure on Aneel R&D projects, costs of Cemig's internal process of technological development and innovation, and the costs of special projects (not related to Aneel) as a proportion of Cemig's net revenue;
- operational expenses, on staff, materials, services, etc.

The principal projects on energy alternatives executed in 2015 are:

Launch of the 29th Minas Gerais State Energy Balance, for the base year 2013, which updates the historic data series for the whole of the state in the period 1978-2013. This can be downloaded at

http://www.cemig.com.br/pt-br/A_Cemig_e_o_Futuro/inovacao/Alternativas_Energeticas/Documents/BEEMG.pdf

This is an essential technical document for dealing with subjects related to energy. It has a history of systematic information on the various components of energy supply and use in the state since 1978. It has important and essential data for studies for planning of the integrated use of energy sources, energy efficiency, technological management; socioeconomic studies and action, greenhouse gas emission studies, and studies of sustainable development. The updated version again shows the preponderance of energy from renewable sources in the composition of *Minas Gerais*'s energy matrix.

- **Research and Development of Sustainable Electricity Generation by Motor Generators using Charcoal Agroindustrial Effluents produced in the Pigiron Production Chain** – This is R&D project GT 496, undertaken in partnership with the Federal University of *Ouro Preto* and the company *Ondatec Tecnologia Industrial em Micro Ondas*. Its aim is to generate electricity using effluents from pyrolysis of vegetable biomass, considerably reducing the potential for pollution and increasing energy efficiency in the production of charcoal. Cemig invested R\$ 217,000 on this project in 2015. The project is at final stage, with the results being analyzed and consolidated. The prototypes are functioning and the liquid and gas fuels are being collected for production of electricity. There is expectation that feasibility of the use of these wastes for production of electricity for the process of charcoal production itself will be proven, and that the excess output will be able to be injected into Cemig's network.
- **Gasification of Solid Urban Waste for Generation of Electricity** – This is R&D Project GT 418, currently in progress. It is a partnership with the Federal University of *Itajubá* and the company *AG Therm Caldeiras e Equipamentos*. Its aim is to construct a pilot scale unit for fluid bed gasification of combustible elements derived from urban solid waste biomass, reducing the environmental effect caused by these wastes in the region. The project is in the last of its planned four years, with the possibility of extension for one more year.
- **Development of a Super Capacitor for Use as a Battery Buffer in Electric Cars** – This project aims to prolong the life of vehicle batteries and consequently reduce the cost of mobility per km, by protecting batteries from the damage caused by excessive charge/discharge cycles, which are inherent to vehicle applications, by developing super capacitors that are cheaper and more efficient than those currently found in the market.
- **Development of a PVT (photovoltaic-thermal) Solution for Greater Efficiency of Solar Plants** – This project aims to develop a PVT system for the preheating of water, by withdrawing the heat from photovoltaic modules used to generate electricity. The project also has the following specific aims: (i) to develop a prototype solar collector to couple to existing photovoltaic modules, to provide heat exchange between the module and the working fluid; (ii) to increase the efficiency of conversion of electricity of the photovoltaic modules, due to working at lower temperatures; and (iii) to establish the optimal working temperature of the photovoltaic module, reflecting use of undesired waste heat generated in photovoltaic systems.
- **Assessment of the Potential for Cogeneration in the Minas Gerais Cement Sector** – This project is to research and assess the opportunities, technological alternatives and barriers for development of the potential of cogeneration in the cement sector in *Minas Gerais*, using the Kalina cycle, taking into consideration the various aspects – technological, economic, market and environmental – aiming to identify viable projects to be executed by companies of the Cemig group with a more appropriate technology.
- **Development of a System to Calculate the Potential for Generation of Electricity from Biomass in Minas Gerais State** – This project aims to map all the types of culture and wastes used for generation of electricity from biomass, using georeferencing techniques to map the use of biomass in *Minas Gerais*. The aim is to maintain a clean energy matrix with distributed generation, and to decide, and prioritize, the regions or counties that are most appropriate for the establishment of plants to use biomass for energy purposes; and to identify the best alternative technologies for each region/county selected, in *Minas Gerais*.
- **Development of the Technical and Institutional Arrangements for Generation of Electricity from Solid Urban Waste Biogas** – This project aims to develop a wide ranging study on all the aspects relating to regulations, public policies, planning, technical, commercial and economic considerations, for inclusion of biogas from solid urban waste into the electricity supply sources network, aiming for the maximum gain not only for the electricity sector but for society.

Relationship with consumers

For Cemig, the quest for excellence in serving and satisfying clients and consumers is a highlight of its corporate mission and view of the future. It therefore treats subjects related to clients and consumers as significant priority areas, regularly monitored by management and stockholders.

The satisfaction of Cemig's clients and consumers is a matter of direct interest for its employees, who have a variable part of their remuneration linked to the Company's performance in the IASC (*Aneel* Index of Consumer Satisfaction) Index researched and calculated by the regulator, *Aneel*.

This is one way in which Cemig aims to mitigate the risks associated, under the regulations, with factors in client satisfaction. *Aneel* and other bodies can impose financial sanctions on a concession holder, or it may be subject to administrative sanctions from bodies such as the local Consumer Protection agencies (*Procon's*) – for various levels of inappropriate conduct. Cemig encourages compliance with all the regulatory requirements, rules and targets, as well as its own additional initiatives, to ensure that it remains coherent with its vision, and admired by clients and consumers.

These measures have a positive effect on the Company's image in the market: They are incentives for compliance with regulatory quality standards, and they result in the Company's brand and reputation gaining value through recognition by awards. The following are some of the awards that gave recognition to Cemig in 2015:

- The "*Consumidor Moderno* (Modern Consumer) Client Service Excellence Award" in the Electricity category, recognizing management excellence focused on value given to relationship with clients and increasing their satisfaction. As well as this award, Cemig went up nine places in the ranking of service quality of Brazil's electricity distributors, as researched by *Aneel*, in the year. Cemig also achieved its best result for the indicator SAIDI (System Average Interruption Duration Index), which measures the average time of consumer outages in the year – with the best result for the last 10 years. For more details, see the item Electricity Quality.

Cemig evaluates its management of service activities, and client satisfaction, through performance indicators based on the BSC - Balanced Scorecard approach. These indicators have targets designed to stimulate improvement in quality. They measure:

- Performance of the client service channels: waiting time; level of call center service; response time; period for requests to be met; duration and frequency of complaints; client opinions on the attendants.
- Performance of the electricity system: duration and frequency of complaints on failures, disconnection rates; performance on critical days.
- Satisfaction indices.
- Public Safety: indices related to safety of the population when interacting with the electricity system.

These indicators support the creation of plans of action for continuous improvement in service and satisfaction. One example is the *Cemig Atende* app for iOS and Android.

Simultaneous Reading and Printing of Electricity Bills

On-site billing (OSB) is done with a micro-data collector and a software enabling the electricity bill to be calculated immediately after reading the meter in the client's home. With a portable thermal printer, the reader issues the electricity bill at the location and delivers it directly to the client. This saves approximately 14% in the expense of printing and delivery of electricity bills – as well as increasing client satisfaction, due to the perceived transparency of the meter data and billing, and

also the reduction in greenhouse gas effect from fewer deliveries of bills by post.

In 2015 Cemig changed its on-site billing and printing equipment throughout the state. The new equipment is robust, more dust- and water-resistant, lighter, ergonomic, and able to notify and verbalize failings. Also, due to the acquisition cost being lower, it was possible to acquire 40% more units of equipment, as this table shows:

	PREVIOUS METERING CAPTURE SYSTEM	PRESENT METERING CAPTURE SYSTEM
Cost of location and maintenance of the hardware and software for 48 months	R\$ 57.6 million	R\$ 15.4 million
Components (Micro reader/collector and Printer)	2,359 units	3,299 units
Software	Outsourced	Own

The change in the meter reading system, as well as expanding Cemig’s hardware, produced savings of R\$ 42.2 million in 48 months, that is to say, at the rate of R\$ 10.5 million/year.

The system operates off-line – i.e. without instantaneous connection to the central database. This system was put in place initially in February 2013, and now covers 5.02 million clients (December 2015), corresponding to 61.2% of the market. The target is to reach 7.2 million clients by December 2016.

How this process has developed is seen in the results of the 2015 ISQP survey (please, see more information on ISQP at the topic “Consumer Satisfaction” ahead).

Public lighting

Complying with *Aneel* Normative Resolution 414/2010, and Item V of the 1988 Federal Constitution – which gives counties/municipalities the duty of “organizing and providing, directly or under a regime of concession or permission, local public services” – in January 2015 Cemig transferred all public lighting assets to the municipalities in its area of operation.

After the transfer, 41 counties/municipalities filed legal actions with the Regional Federal Appeal Court for injunctions to suspend effects of the *Aneel* Resolution, and for Cemig to continue to be the provider of maintenance service for public lighting.

Cemig contested this with applications to overturn injunctions, and is awaiting legal opinion. In parallel, Cemig informed *Aneel* about these court demands, and that for those municipalities it would continue to issue the B4Bb Tariff billing (applied when the concession holder is responsible for maintaining Public Lighting).

CONSUMER SATISFACTION

PR5

The *Aneel* Consumer Satisfaction Index (IASC) and the Perceived Quality Satisfaction Index (ISQP) are important tools that help Cemig in its quest to improve the services provided, due to the insight that they give on consumers’ perceptions.

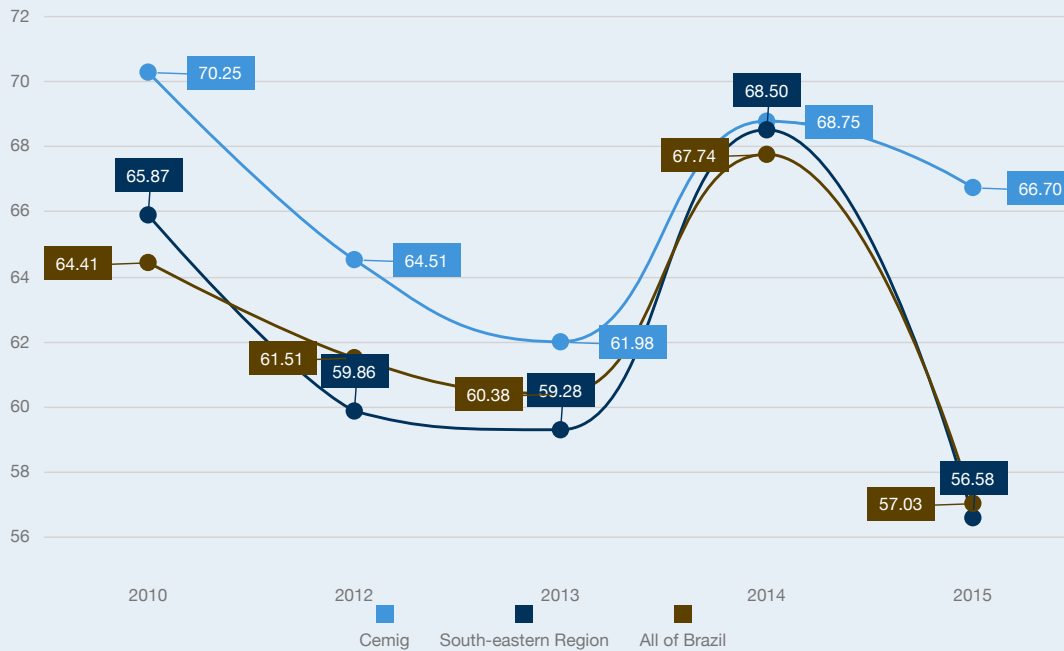
The IASC is the result of a survey with residential consumers that *Aneel* carries out annually to assess the degree of residential consumers’ satisfaction with the services provided by distributors. In 2015, this involved 450 interviews in 19 counties/municipalities of Cemig’s concession area.

The IASC

In 2015 Cemig’s IASC score was down by 2 percentage points from the previous year, at 66.7, compared to 68.7 in

2014. However, there are indications that this reflects the atypical situation in electricity in 2015 – tariff increases, especially including the ‘Tariff Flag’; the transfer of public lighting; and the loss of the social electricity tariff benefit (TSEE) – because Cemig remained above the average of the IASC for Brazil (57.03) and the Southeast (56.58), that is to say, it was 17% higher than the national average and 18% higher than the average for the Southeastern region, in spite of the retraction in the absolute number:

Client Satisfaction Index



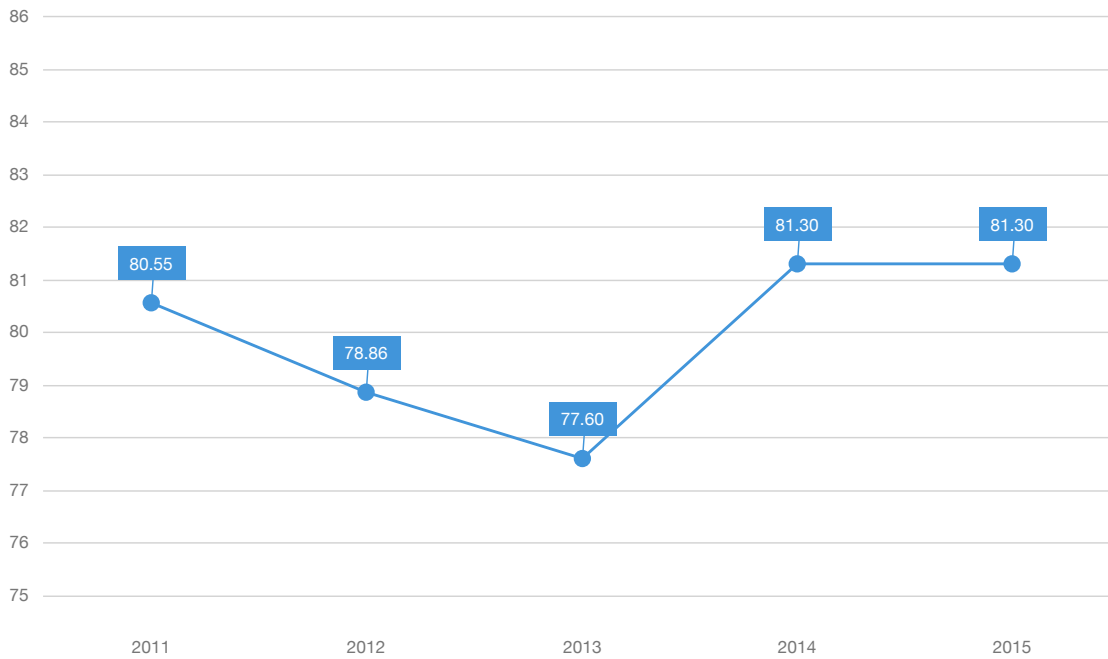
This result earned Cemig the IASC 2015 Award for the best assessment by residential consumers in the category Southeast – over 400,000 consumers, in which it competed with eight major concession holders of the region. This result represented an improvement of 21 positions in the general ranking of Aneel, from 31st in 2014 to 10th in 2015 – today it is the only distributor with more than 400,000 consumers placed in the 10 best in Brazil in this ranking.

The Perceived Quality Satisfaction Index (ISQP) is calculated using five areas of quality (electricity supply, information and communication, electricity bill, client service, and image).

In 2015 Cemig’s ISQP score was 81.3, the same as in 2014. The best results were in the Electricity bill category, with the index for Bill with no errors up 6.5 percentage points; Availability of places for payment up 4.3 percentage points; Due date and Electricity supply both up 3.7 percentage points; and Reconnection time on outage up 2.4 percentage points.

On these figures Cemig moved up four positions in the national ISQP ranking in 2015, from 16th to 12th: In the southeastern region, it was placed 3rd among Companies with more than 500,000 consumers:

Perceived Quality Satisfaction Index (ISQP)



The balance of Cemig's performance in the IASC and ISQP satisfaction indices is a consequence of the success of the strategy of getting closer to the client, with integrated actions – these are validated and monitored by the Client Committee. A highlight is the *'Breakfast with Cemig'* initiative, in which clients, mainly housewives, are invited for a 'chat' about the Company's activities. Cemig has been working strongly on improvement in its relationship channels, whether virtual, face-to-face, or by telephone – always guided by respect and transparency, and the aim of providing facility, reliability and comfort to its clients. Today Cemig's client has at his/her disposal service channels such as *"Cemig Atende"* (*Cemig Answers*), the Telegram messaging service, and the service app for Facebook. Cemig is also making continuous efforts to improve its services through its Distribution Development Program (PDD) which, among other objectives, aims to reduce frequency and duration of outages in supply.

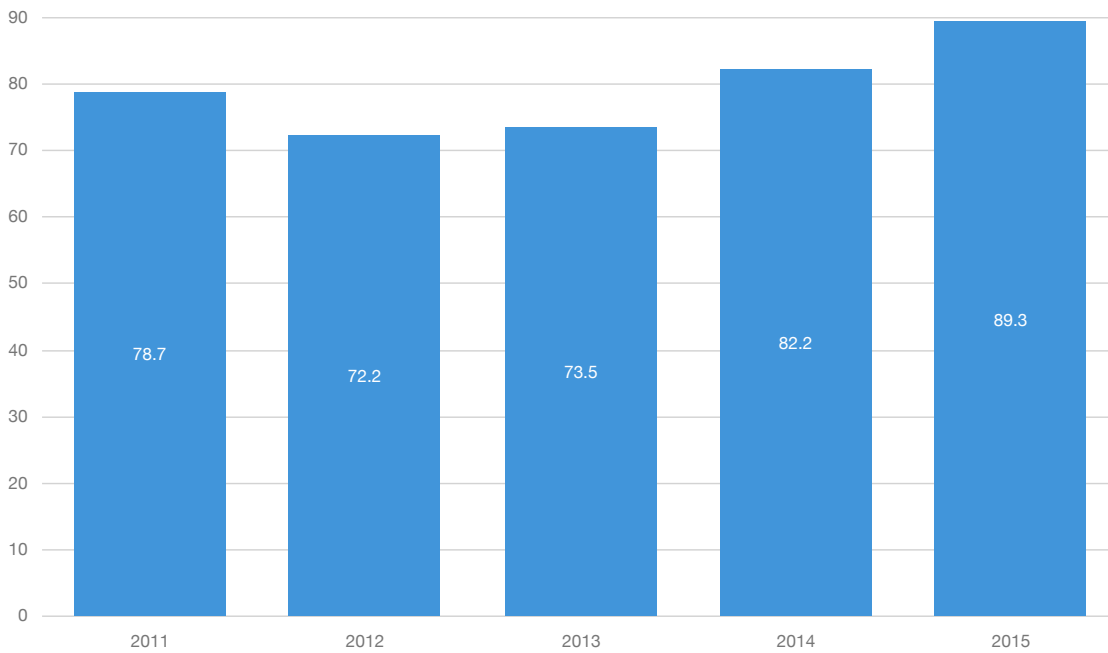
2015 was a challenging year, due to the alterations in the electricity sector which directly affected distributors. To mitigate the negative effect on client satisfaction, we took 21 initiatives over the course of the year for getting closer to clients, for operational improvement and for communication. To raise the awareness of employees and outsourced service providers on their responsibility and contribution in the processes of client satisfaction, we established internal programs such as online training on satisfaction surveys, and our *Internal Client Week*.

Cemig has also put in place a Commercial Relationship Contingency Plan, aiming to mitigate the consequences of the increased flow of demands at Company's branches, service posts and call centers that have arisen from a number of factors: removal of the social electricity tariff benefits; application of the 'Tariff Flag' system, with its accompanying rate increases; and the increases under the Extraordinary Tariff Review, the annual tariff adjustment, etc.

Cemig intensified activity in several external initiatives – including the Housewives' Breakfast, the Theater of Light, Bill Renegotiation Week, and Consumer Week. The Company has also positioned itself more consistently in the social media, both as a route for the client contact, and also a way of publishing content of public utility and consumer interest.

The Medium Voltage Client Satisfaction Index (ISMT) measures the level of satisfaction of large clients as to the quality of the product and the services provided by the distributor. In 2015 interviews were held by telephone with 458 clients of the A4 tariff sub-group – served at medium voltage, from 2.3 KV to 25 KV – and this resulted in a satisfaction index of 89.3%. This chart shows the result for Cemig – which was the best among 28 concession holders researched:

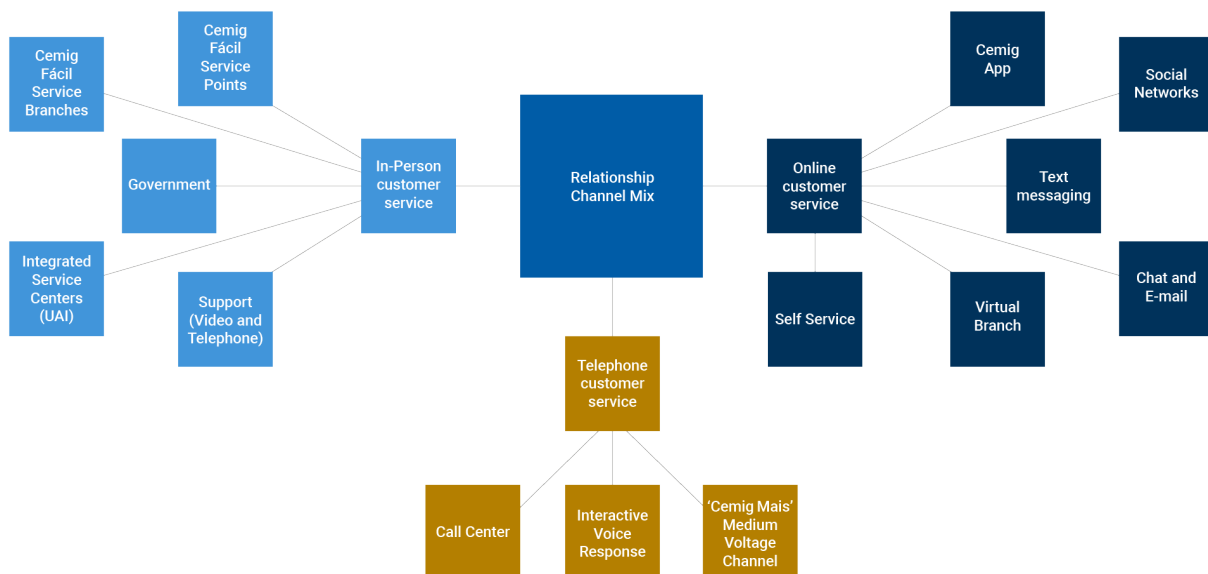
Medium Voltage Client Satisfaction Index



The improvement in the index is a reflection of the plan of action put in place by the “Cemig Mais” team. Among the actions taken, we highlight the Regional Medium Voltage Client Meetings. In 2015, 13 of these meetings were held with 377 consumers, who were asked to fill in questionnaires evaluating the importance, the information quality and format of the event. In the responses, 84% said the event met their expectations, and 14% that they were exceeded.

RELATIONSHIP CHANNELS

Cemig is present in all the 774 municipalities/counties of its concession area. Aiming to get closer to consumers and strengthen relationships with them, while providing an up-to-date service with quality and transparency, Cemig makes available a mix of service channels through various media: face-to-face, by telephone and online.



The face-to-face customer service is given by the “Cemig Fácil” (Cemig Easy) service network, operating in 156 branches and 622 Service Posts.

Cemig's telephone customer service is through “Fale com a Cemig”(Talk to Cemig), reached by dialing either 116, or 0800 721 0116, and available 24/7. It attends requests for emergency service relating to the electricity system, and information or

requests on commercial services. Cemig also has a text message service ("*Cemig Torpedo*"), through which the consumer can advise of outages, consult bill balances, ask for meter readings, etc., by messaging the number 29810. The client has only to inform the tax identity number of the account holder and indicate the word for the service required.

For the online channels, Cemig's highlight the app "*Cemig Atende*" (*Cemig Answers*), for smartphones and tablets on Android or iOS. This enables clients to access 16 services – for example communicate outages, report a meter reading, check balances due or receive a second copy of their bill. Clients can also access information on a case in progress, information about Cemig, tips for saving, and a consumption simulator.

Cemig also makes a 'Virtual Branch' available on its site, opened by tax number and password, in which clients can ask for the most demanded services – such as second copy of electricity bill, checking of balance due, change of due date, registry to receive bill by email, etc.

Cemig provides client service through the social media Facebook (*Facebook.com/Cemig.atende*) and Twitter (*@Cemig_atende*), seeking maximum interactivity with clients, in a rapid and objective language enabling clients to request any service or information, have questions answered and even receive tips on use of electricity. In 2015 a total of 27,864 contacts were made and received through these social networks. The performance of *Fale com a Cemig* in the relationship with clients through social media was so significant and publicly recognized that it earned Cemig nomination for the *Época/Reclame Aqui* awards in 2015 – in which it was the winner, for the third year running, in the category *Public Services – electricity*.

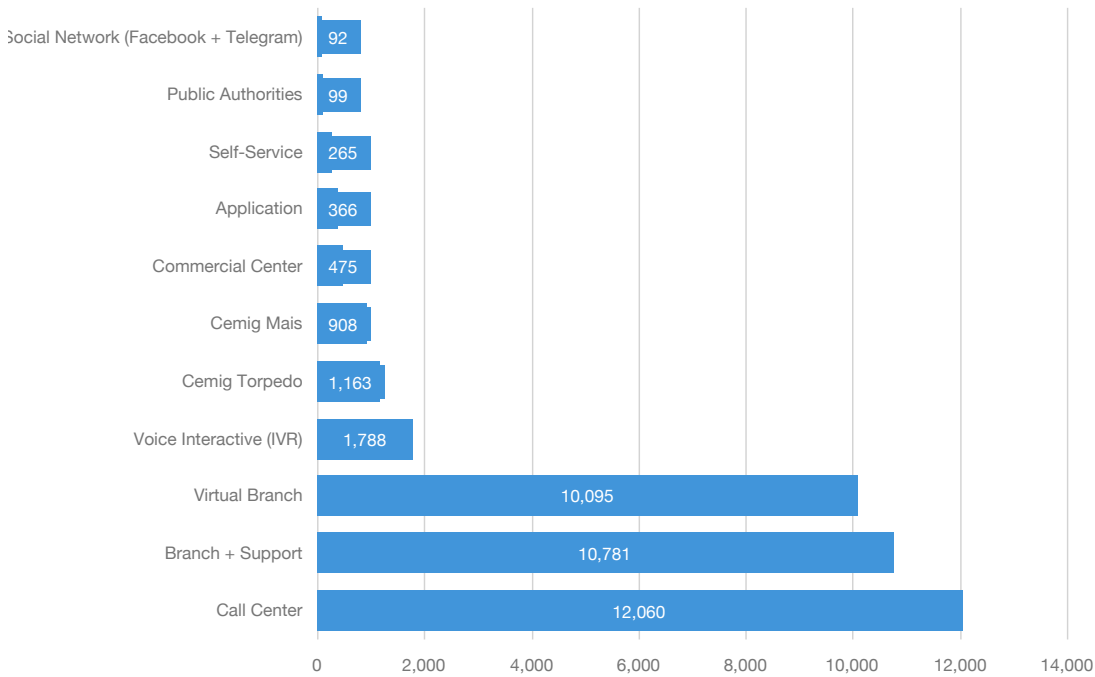
As well as its continuous investment in improving existing channels, Cemig seeks new forms of relationship to offer options of contact with the company that are more convenient and flexible. Three more options were added in 2015: the Facebook app (25,505 clients registered), the Self-service Terminals in branches; and the *Telegram* messaging service (2,022 clients registered). The *Telegram* app is completely free, and provides self-service through exchange of messages in real time. It is compatible with all operating systems and smartphones, and clients can access six services: locate a branch; payments due; consumption history; report a reading; report an outage; and service history.

The Cemig Facebook self-service app has 18 services – among other options the user can: request second copy of bill; see billing and service history; report meter readings; and *locate branches*. The advantage of this channel is that once the client has registered his/her data they are automatically linked to the app, providing access to online service and consultation of data through the same username by social media.

In 2015 Cemig also made self-service machines available for printing a second copy of electricity bills for payment in its branches.

In total, these channels provided 356,000 service contacts during the whole year of 2015.

Number of client contacts made, by service channel (thousands)



Cemig's Consumer Council represents collective interests, and works to defend them, putting forward suggestions, cooperating in oversight, and forwarding complaints and grievances to Cemig about general electrical energy supply conditions. The Council has a consultative role, and is made up of representatives of electricity users in the rural, commercial, residential, and industrial categories, the public authorities in their role as consumers, and the consumer defense body *Procon*.

In 2015, the Council promoted five ordinary meetings where issues related to the tariff review, defaults, power quality, legislation and regulation of the sector, ombudsmen, among others were discussed.

In 2015 a highlight was the Seventh Meeting of Electricity Consumer Councils of the Southeastern Region, which aimed to share important information about the electricity sector and the implications for Southeastern Region consumers, and to make proposals on the subjects dealt with. Highlights in 2014 included: the meetings held in new regions of the state; educative information supplied to members of the Consumer Council about electricity sector issues; holding of a public hearing to address supply issues; and participation of members of the Consumer Council at electricity industry events.

Cemig's Ombudsman

Cemig's Ombudsman

2015 was marked by significant increases in electricity prices – the average rate increase was around 40%. This caused a considerable change in consumers' behavior, making them more demanding and attentive – and they increasingly questioned the components of their electricity bill.

The number of issues brought before the Ombudsman increased by 40% in 2015. For enquiries direct to *Aneel*, this percentage increase was 130%. This is related to *Aneel* changing the opening times of its central telephone service (available by dialing 167) from business days only, 6am to midnight (in 2014), to 24/7. Also, *Aneel* ceased to charge for telephone calls originating from mobile phones. These two factors were important causes in the significant increase in the number of consumers contacting the regulator.

Leading subjects of complaints

Both internally and at *Aneel*, the Ombudsman functions as a thermometer of what is happening with Cemig in

relation to its clients' perception. Among the cases and subjects dealt with by the Ombudsman's office in 2015, many stand out and are subjects under discussion within the Company.

On December 31, 2015 the required period for Cemig to comply with requests for connection involving extension or modification of the network, and the 'Universalization Resolution', No. 488/12, expired. This resulted in a large volume of demands – as from January 1, 2015 – related to requests that had not been met within the period. During the whole of the year this was the subject with the highest number of complaints – approximately 32% of the cases brought to, and dealt with by, the Ombudsman.

Another subject with a large number of Ombudsman cases was that of consumer complaints based on the increase in the price of electricity.

Highlight of 2015

After the test period at the end of 2014, as from January 1, 2015 cases brought to *Aneel* directly without going through the Cemig Ombudsman were to be assumed and dealt with as an Ombudsman process within Cemig itself. In 2014 Cemig's Ombudsman had dealt with 4,641 cases – but in 2015, partly reflecting the implementation of the joint channel, this number increased to 12,464.

The positive result of the change was the lower number of cases dealt with by *Aneel*, which reduced the company's exposure to the regulator.

ELECTRICITY QUALITY

DMA

Cemig is continuously taking action to improve its operational management, the organization of the logistics of its emergency services, and its permanent routine of preventive inspection and maintenance of substations, distribution lines and networks.

EU28

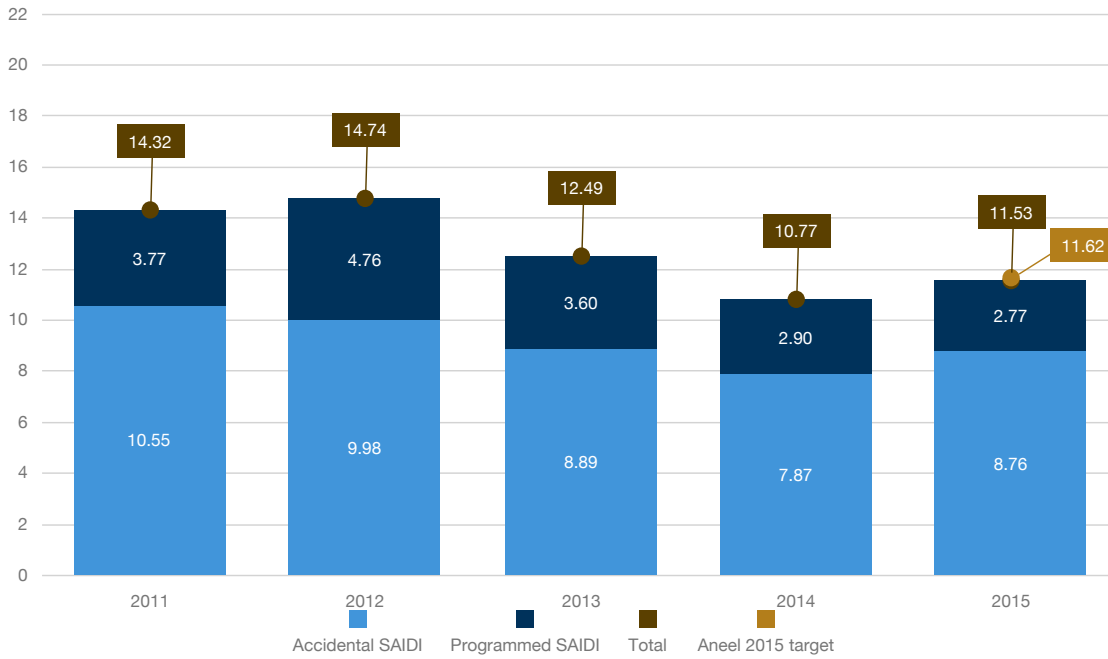
It also invests in continually improving the qualifications of its professionals, in state-of-the-art technologies, and in standardization of work processes.

EU29

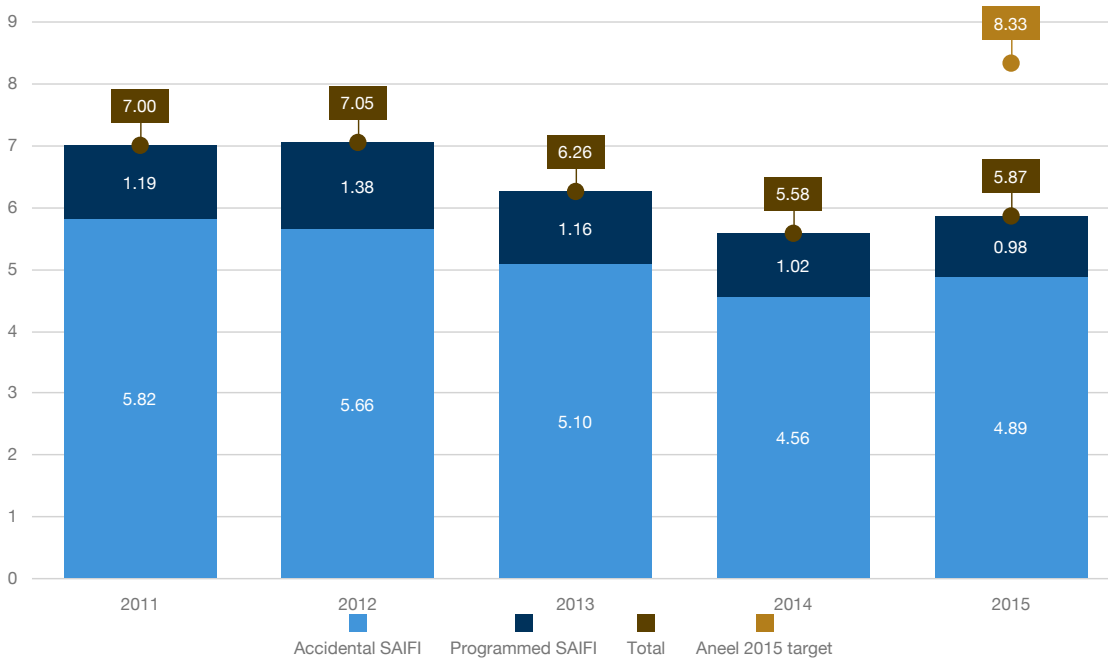
The indicators of outage duration and frequency – SAIDI (System Average Interruption Duration Index) and SAIFI (System Average Interruption Frequency Index) are tools that help in assessing the effectiveness of actions taken. Outages are divided into those caused by accidents and those that are pre-programed for maintenance of the electricity system.

The charts below show how the SAIDI and SAIFI indicators have developed: they show a significant continuous improvement, meeting the standards established by *Aneel*, and demonstrating that the investments made in the actions, as described above, to improve the quality of supply, are on the right path.

SAIDI



SAIFI



In 2015 Cemig paid approximately R\$ 37.3 million in compensation to consumers for violation of the individual electricity supply continuity indicators (DIC, FIC, DMIC and DICRI).

The higher SAIDI and SAIFI indicators in 2015 contributed to the higher total of amounts paid to consumers as compensation, but the main factor in complaints was the increase – of an average of 40% – in tariffs charged to the consumer:

YEAR	COMPENSATION (R\$ MILLION)
2013	24.3
2014	20.3
2015	37.3

Consumer Health and Safety

There are of course no labeling requirements for electricity – but Cemig invests in communications on safe use of electricity, both by campaigns in the media and by providing multiple relationship channels that offer information to consumers. Other information – about social, environmental and economic impacts – is available to the public in, among other sources, the Annual and Sustainability Reports, which are on the website. All Cemig’s communications obey the recommendations of the Brazilian Corporate Communications Association (*Aberje*); its advertising agencies obey the Brazilian Advertising Self-Regulation Code, established by the Brazilian Council for Self-Regulation in Advertising (*Conar*).

As well as its constant concern for its workforce, Cemig carries out a variety of accident prevention activities and campaigns addressed to the general public, including: lectures and presentations at construction sites and in schools; calendars with electricity safety tips; public service spots on radio and internet media; and advertising on traditional media (TV and radio).

[EU25] The number of accidents involving the general public was 16% lower in 2015 than 2014:

NUMBER OF ACCIDENTS WITH THE PUBLIC	2012	2013	2014	2015
Accidents without fatalities	82	114	96	82
Accidents with fatalities	29	28	19	15

In December 2014, there were 192 legal actions in progress for accidents to the public, involving fatalities and injuries. In 2014, 25 of these actions were heard: 5 were rejected; 3 were upheld; 4 were upheld in part; and 11 were settled out of court.

INFORMATION SECURITY FOR CLIENT AND CONSUMER DATA

Cemig’s Computer Security Incident Response Group, created in 2014, became an official member of the National Security Incidents Processing and Studies Center.

Cemig’s Digital Signature Portal was launched in 2015, to empower the use of paperless digital signatures. It is fully compatible with the standards of ICP-Brasil (Brazilian Public Keys infrastructure), providing legal validity to the documents signed.

In October 2015 Cemig launched a new information security campaign, under the slogan ‘A Clean Desk’, to raise awareness among the Company’s workforce on beneficial information security practices, use of printing and sending of emails, and effective organization of the work space. It was disseminated in posters and wall journals in 2015 and is being continued in 2016.

Cemig’s 11th Information Security Survey was held, delivering the ISI Information Security Indicator, which reflects the current status of information security risk management in the company. The ISI score in 2015 was 70.22 – higher than the 2014 result, of 68.98. The survey provides a measure of the maturity and compliance of the analysis of information security risk, on a comparison with market standards and the legislation.

The Information Safety Management Unit received no complaints on violation of privacy or loss of client data in 2015.

All the client data used for access in the client service channels follows standard information security protocols, to avoid any episodes of violation of privacy or loss of client data. The company has an Information Security Policy, various internal instructions for procedures and forms of control, and also produces bulletins and holds safety campaigns addressed to employees. Cemig makes no commercial use of its clients’ data.

TARIFFS

Tariffs are an important subject for Cemig, since their levels directly influence its economic and financial situation – and

hence its sustainability. The methodology adopted by the regulator (*Aneel*) for setting tariffs and regulatory revenues is based on the concept that the revenue should be sufficient for the concession-holder to achieve economic and financial equilibrium.

Aneel sets and defines levels of revenue, in the form of a tariff for the distribution business, and in the form of “*Receita Anual Permitida*”, or “RAP”(Permitted Annual Revenue), for the transmission business. For the generation business, especially with the passing of Law 12783 [↗](#)

This law made new provisions governing electricity generation, transmission and distribution, reduction of the sector's internal charges, and makes rules governing tariffs.

, of

January 11, 2013, the subject has become extremely important.

In 2015, Cemig won Lot D in *Aneel* Auction 12/2015 for commercial operation of the concession of 18 generation plants. Under the new system, Cemig sells the electricity from these plants under the *Physical Guarantee Quota* regime, and receives a regulated revenue: the “*Receita Anual da Geração*”, or “RAG” (Annual Generation Revenue). Many of the plants that Cemig won at this auction were already Cemig plants, the concession periods for which had expired.

The risks associated with the subject are inherent to the logic of regulation by incentive, which simulates a competitiveness in the market, creating a demand for the company to continuously seek efficiency and best practices. Another factor generating risk in regulated businesses is the possibility of new rules being introduced due to changes in policies for the sector, altering the established scenario. To identify and manage regulatory risks, Cemig takes action to monitor and analyze the evolution of the regulatory context governing electricity services – and proposes changes to maximize and safeguard the Company's results, in alignment with the interests of clients and consumers.

The Company maintains a dialogue on management of tariffs through active participation in public hearings held by *Aneel* on the subjects related to economic and financial regulations, and with the Mining and Energy Ministry, pointing out any unforeseen negative impacts in proposals that are made, and contributing improvements. This activity also involves interacting with *Aneel* in the tariff-setting processes, contributing to correct repositioning of tariffs. Tariff management is also an internal activity, in that people inside the company receive training in understanding the regulatory rules, and support in management of the various cases and procedures the company is involved in.

The approach to tariff management employs four indicators:

- Projected vs. Actual Revenue – which assesses the effectiveness of the forecasts that Cemig has made based on knowledge of rates and authorized revenues.
- Training and Lectures on Economic Regulation and Tariffs – dissemination of understanding on tariffs to the other areas of the company, which helps maintain alignment of the Company's processes with the regulatory rules.
- Number of contributions accepted by the regulator in hearings and/or public consultations – this measures the various degrees of success in influencing changes in the sector's regulations.
- Finally, a success rate is calculated for the tariff review processes, related to the recognition of the investments made.

The Board of Directors evaluates these indicators periodically; possible points of enhancement and divergence are assessed within the process of continuous improvement, and preventive and/or corrective measures are adopted so as to ensure that management mechanisms adhere to company goals. All Cemig's regulatory processes are monitored and reviewed regularly by the Committee for Regulatory Affairs (CAR). This is made up of representatives of all management departments, and is responsible for evaluating and offering proposals for contributions at public hearings held by *Aneel* and the Mining and Energy Ministry.

There is also an automated computer system for monitoring of regulatory obligations (“Condor”), which monitors deadlines and compliance with requests and obligations imposed by industry bodies. The indicator *Level of Fulfillment of Regulatory Obligations* (“ICOR”) regularly evaluates this monitoring system.

The Annual Tariff Adjustment

The Annual Tariff Adjustment for Cemig D

This takes place every year in April, except in years when there is a Periodic Tariff Review (overall revision of rates). The aim of the process is to pass on non-manageable costs in their entirety, and to provide monetary updating of the manageable costs which are established in the Tariff Review. The index for adjustment of manageable costs is the IGP-M, but in addition, an X-Factor is deducted which is designed to capture productivity, following the method of a price-cap regulatory model.

Effective from April 8, 2015 through April 7, 2016, *Aneel* increased the rates Cemig can charge for electricity by an average of 7.07% – in relation to the tariff in effect at that moment, that is to say the one approved in the Extraordinary Tariff Review that took place on March 2, 2015.

Three factors contributed almost equally to this increase of 7.07% – cost of energy purchased, with 2.53%; sector charges, with 2.77%; and transmission, with 2.50%. The remaining element, a reduction of 0.29%, reflected the variation of the costs directly associated with the distributor, referred to as 'Portion B'.

For Residential consumers, the increase in the rate charged was 5.93%. For industrial and service sector consumers, served at medium and high voltage, the average increase was 8.12%. For those served at low voltage, the average increase was 6.56%.

Of the amount charged to the consumer on the invoice, 20.6% remains with Cemig D, to remunerate the investment, cover depreciation and pay the concession holder's running costs. This amount is referred to as 'Portion B'. The remaining 79.4% is passed on, covering the cost of electricity purchased for resale (31.1%), and sector charges (3.3%) – this total being referred to as 'Portion A', and taxes. The taxes comprise: *ICMS* tax (at 20.2%), and the *PASEP* and *COFINS* taxes (which total 4.6%).

The most important component of costs that had to be passed on to the consumer was the result of the hydrological conditions of the last two years, which gave rise to large-scale use of the country's thermoelectric plants – whose generation is much more expensive than hydroelectric output. These costs have been, or will be, supported by loans, from (i) the Wholesale Trading Chamber (CCEE) – originating from the 'ACR Account', created for the purpose and (ii) the Federal Treasury; and also by a special component of the CVA (the '*Portion A Items Variation Account*') known as the *CVA Energy Element* (or '*CVA Energia*').

The Extraordinary Tariff Review

At the beginning of January 2015 the significant increase in the expense of the "*Conta de Desenvolvimento Energético*", or "CDE" (Energy Development Account) led the distributors to request an Extraordinary Tariff Review. Accepting the request, the regulator approved an increase in electricity bills for consumers throughout the country, with the exception of five distributors: *Ampla* (Rio de Janeiro State), *Companhia Energética do Amapá*, *Amazonas Energia*, *Boa Vista Energia* (State of Roraima), and *Companhia Energética de Roraima*. This Extraordinary Tariff Review came into effect March 2, 2015, and increased the tariffs of electricity distribution concession holders, but without canceling their ordinary tariff increase for 2015. For Cemig D, this Extraordinary Review resulted in an average increase in tariffs of 28.8%, and referred only to two elements: purchase of electricity (6.2% of the total) and the increase in the CDE charges (22.6% of the total). For residential consumers of Cemig D, the increase was 21.39%.

Extraordinary Tariff Reviews take place when there are significant changes in the costs of the components of tariffs, either upward or downward, which need to be passed through to consumers. The review of 2005 took into account the amounts of the CDE charge, and distributors' costs of purchase of electricity, resulting from the increase in the cost of power supplied by *Itaipu*, and new auctions at much higher than previous average prices.

The 'Tariff Flag' system

Aneel has instituted a tariff 'flag' mechanism, to send consumers a signal of the conditions affecting electricity generation in their region in the month of their consumption, enabling the client to practice a rational response to the price of electricity. The mechanism came into force in January 2015 (under Sub-module 6.8 of the Tariff Regulation Procedures – 'Proret').

The system has three 'flags': the Green Flag indicates that conditions are favorable to generation, and carries no tariff increase; the Yellow and Red Flags indicate less favorable, and critical, conditions for generation, and result in additional charges on the consumer tariff.

The 'Red Flag' tariff was in effect for the whole of 2015, and the price surcharge it imposes was changed three times in the year. From January to March the Red Flag tariff was R\$ 0.30/MWh. From March to the end of August it was R\$ 0.55/MWh; and for the rest of the year it was R\$ 0.45/MWh.

Distributors pay their Tariff Flag revenues into a central account, managed by the Wholesale Market (CCEE). The funds available in this account are paid back to distributors depending on their needs to cover the costs of thermally-generated electricity and the effects of exposure to the spot market.

As well as being a signal to consumers on the tariff they will be charged, the Tariff Flag system is also an important mechanism for mitigating the *timing* mismatch between a distributor's increased expense and the reimbursement the distributor received of the extra expense through the tariff. In spite of the increases in tariffs given in the Extraordinary Tariff Review and the Annual Tariff Adjustment in 2015, this mismatch continues to exist.

Adjustment to tariffs of Cemig GT

The annual adjustment of transmission revenue takes place on July 1 of each year, except when there is a Periodic Tariff Review. The aim of this process is to provide monetary updating adjustment of the Annual Permitted Revenue (RAP) that had been previously approved, and also to add to the value of the RAP any element necessary to reflect improvements to the transmission asset base that have been made and started commercial operation during the last tariff cycle. The result is calculation of an Adjustment Amount. The regulatory methodology is the revenue-cap method. The inflation index used by *Aneel* for monetary adjustment of Cemig GT is the IPCA.

As well as concession 006/97, Cemig GT also has the concession for a substation, won through a tender, the *Itajubá* substation, which is also adjusted in July. For this concession, the adjustment index is the IGP-M inflation index.

In July 2015 Cemig GT's RAP was increased by 23.6%, resulting from application of the IPCA index to the revenue previously ratified, and also addition of recognition of improvements and expansions strengthening the network. The adjustment given to Cemig for *Itajubá* was 4.1%. The approved and ratified Revenue for the 2015-16 period, for the two concessions, is an aggregate of R\$ 270,685,392.29.

CUSTOMERS IN ARREARS

EU27

Aneel regulates the procedure for suspension and reconnection of electricity, through Normative Resolution 414/10. Supply is suspended for non-payment of the electricity bill, preceded by a warning, with proof of delivery, and 15 days' minimum advance notice. When reconnecting, the distributor must obey these deadlines:

- Normal reconnection in an urban area: 24 hours;
- Normal reconnection in a rural area: 48 hours;

The period is counted from notification of payment, clearance of the debt in the distributor's system, or a request for

reconnection made between 8 a.m. and 6 p.m. on business days. For notification after 6 p.m., or on a non-business day, the period starts at 8 a.m. on the next business day.

The table below shows the period between disconnection and reconnection (i.e. not from request to reconnection).

DURATION OF DISCONNECTION	2013	2014	2015
	TOTAL AGGREGATE DISCONNECTION TIME	TOTAL AGGREGATE DISCONNECTION TIME	TOTAL AGGREGATE DISCONNECTION TIME
< 48 hours	130,075	169,606	188,607
48 hours – 1 week	42,781	39,927	41,371
1 week – 1 month	35,317	32,283	36,058
1 month – 1 year	66,494	36,014	57,756
> 1 year	14,260	7,761	5,159

There were 753,182 disconnections in 2015 due to non-payment of electricity bills.

In its attempts to reduce default, Cemig uses a wide range of tools and media other than disconnection: payment requests by e-mail; text message and letter; negative credit reports; re-disconnection when the consumer reconnects without permission; disconnection with meter seal (biodegradable); administrative collection; e-mail negotiation by dedicated staff; special negotiation campaigns; negotiated payment at pre-litigation and pre-hearing stages; and collection through the courts.

CEMIG'S ELECTRICITY MARKET

DMA

The Cemig Group sells electricity through its distribution company, Cemig Distribuição (Cemig D), its generation and transmission company Cemig Geração e Transmissão (Cemig Generation and Transmission, or Cemig GT), and wholly-owned subsidiaries: *Horizontes Energia*, *Termelétrica Ipatinga* (up to January 2015), *Sá Carvalho*, *Termelétrica de Barreiro*, *Cemig PCH*, *Rosal Energia* and *Cemig Capim Branco Energia* (up to March 2015).

G4+8

EU3

This market comprises sales of electricity to:

- (i) Captive consumers in Cemig's concession area in the State of *Minas Gerais*;
- (ii) Free Consumers in both the State of *Minas Gerais* and other States of Brazil, in the Free Market (*Ambiente de Contratação Livre*, or ACL);
- (iii) Other agents of the electricity sector – Traders, Generators and Independent Power Producers, also in the ACL; and
- (iv) Distributors, in the Regulated Market (*Ambiente de Contratação Regulada*, or ACR).

In 2015 the group sold a total volume of 56,903,594 MWh, which was 10.3% less than in 2014.

Sales of electricity to final consumers plus Cemig's own consumption totaled 46,072,000 MWh, or 6.6% less than in 2014.

Overall, electricity consumption in 2015 was affected by adverse Brazilian political and economic circumstances; and, in the captive market, by the successive increases in electricity rates charged to consumers, associated with application of the Tariff Flag system, resulting in significant increases in consumers' electricity bills.

Sales to distributors, traders, other generating companies, and independent power producers totaled 10,831,194 MWh – or 23.4% less than in 2014.

In December 2015 the Cemig group invoiced 8.078 million clients – growth of 0.9% in the customer base in the year since

December 2014. Of these, 52 are agents in the Brazilian electricity sector.

The tables below show the Cemig Group's market in more detail, itemizing transactions in 2015 compared with 2014. Also below, are comments on the Cemig Group's market:

Sales to final consumers

Residential

The residential consumer category accounted for 17.3% of Cemig's electricity sales in 2015, totaling 9,829,992 MWh – or 1.8% less than in 2014.

The reduction in the level of consumption by households can be explained by reference to the increases in tariffs charged, including application of the Flag Tariff in 2015, which effectively reduced the real income of people in work during that period.

Average monthly consumption per consumer in 2015 was 126.5 KWh/month, or 3.6% lower than the average for 2014 (131.2 KWh/month) – there had been no year-on-year reduction in this variable since 2008.

Industrial

The electricity used by captive and free clients in *Minas Gerais* and other states was 11.3% of the total volume of electricity traded by the Cemig Group in 2015, at 6,433,728 MWh, or 0.6% more than in 2014;

The lower consumption by industrial users is due to:

1. termination of clients' contracts with Cemig GT not renewed at the end of 2014; and
2. continuous retraction in economic activity at state and national level in Brazil, and the performance of the international economy:
 - lower physical production, reflecting undesired inventory levels and less demand, leading to idle manufacturing capacity and lower use of labor (fewer shifts/shorter working hours, forced vacations in some cases, application of employment protection programs, and dismissals);
 - lack of entrepreneur confidence, and low levels of public and private investment;
 - uncertainties in the Brazilian political and economic situation;
 - high cost of corporate credit due to high interest rates, and banks being more selective in granting loans; and
 - reduction of external demand, with reduction of Brazilian exports, and loss of international market share to other foreign suppliers.

Commercial and Services

The electricity used by captive and free clients in *Minas Gerais* and other states was 11.3% of the total volume of electricity traded by the Cemig Group in 2015, at 6,433,728 MWh, or 0.6% more than in 2014.

This reflects 0.1% growth in the volume billed to captive consumers of Cemig D, and growth of 11.6% in the volume billed by Cemig GT and its wholly-owned subsidiaries to free clients located in *Minas Gerais* and other states.

We believe the reduction in consumption by captive consumers can be attributed to the lower number of consumers billed, as numbers of commercial activities closed down due to retraction of economic activity; and possibly also to measures to reduce consumption, motivated by the increase in the cost of electricity in the year.

The increase in consumption by free clients is associated with signature by Cemig GT of 28 supply contracts for electricity from incentive-bearing sources, mainly in other states of Brazil.

Rural

Electricity used by the rural construction category, at 3,379,734 MWh, was 0.3% more than in 2014, and was 5.9% of the total traded by the Cemig Group in 2015. Consumption for irrigation was 1.9% lower year-on-year, while consumption by farmers was 0.6% higher.

The lower consumption reflected lower use of irrigation systems, and the higher price of electricity in the year, affecting production cost.

Other categories

Supply to other categories – government, public services, Cemig’s own consumption, and public lighting – totaled 3,460,015 MWh in 2015, or 1.1% less than in 2014.

Sales in the Free Market

Trading of electricity to other agents in the electricity sector in the Free Market totaled 6,579,095 MWh in 2015, 25.2% less than in 2014, due to termination of contracts.

Sales in the Regulated Market

Cemig’s sales in the Regulated Market were down 20.5% from 2014, due to ending of contracts made under the *Aneel* Regulated Market (ACR) auction in 2011 (for supply in 2012 through 2014).

In 2015, Cemig GT bid at the 18th Adjustment Auction, placing contracts for start of supply in the first half of 2015, thus partially offsetting the effect of lower sales in the regulated market.

Another factor affecting Cemig GT’s sales volume in 2015 was termination of concessions of plants – payment for this output was redirected to the Physical Guarantee Quota regime, and to settlement on the spot market.

Breakdown of total electricity transacted

ITEM	ELECTRICITY (GWH)		CHANGE (2014/2015)
	2014	2015	
Sales to final consumers	49,287	46,035	-6.6%
Residential	10,014	9,820	-1.9%
Industrial	26,025	22,969	-11.7%
Captive	4,076	3,757	-7.8%
Free	21,949	19,212	-12.5%
Comercial	6,395	6,434	0.6%
Captive	6,031	6,026	-0.1%
Free	364	407	11.8%
Rural	3,390	3,380	-0.3%
Other categories	3,462	3,422	-1.2%
Own consumption	38	38	0.0%
Wholesale sales	14,146	10,831	-23.4%
CCEAR contracts in Regulated Market	5,347	4,252	-20.5%
'Bilateral' contracts in Free Market	8,799	6,579	-25.2%
Sales at CEEE	3,946		-100.0%
Total	67,417	56,904	-15.6%
Power transported (load)	17,448	15,671	-10.2%

Number of Consumers (thousand)

ITEM	NUMBER OF CONSUMERS UNITS		CHANGE (2014/2015)
	2014	2015	
Sales to final consumers	8,007	8,080	0.9%
Residential	6,446	6,532	1.3%
Industrial	77	75	-2.6%
Captive	77	75	-2.6%
Free	0.40	0.39	-2.5%
Comercial	720	714	-0.8%
Captive	720	714	-0.8%
Free	0.08	0.11	37.5%
Rural	688	679	-1.3%
Other categories	76	78	2.6%
Own consumption	0.75	0.76	1.3%
Wholesale sales	0.05	0.05	0.0%
CCEAR contracts in Regulated Market	0.03	0,04	33.3%
'Bilateral' contracts in Free Market	0.01	0.01	-40.0%
Power transported	0.48	0.42	-12.5%
Total	8,008	8,081	0.9%

Balance of Sources and Uses

This table shows the balance of sources of supply and uses of electricity sold for Cemig's consolidated market – the total for purchase and sale transactions by companies of the group in 2015:

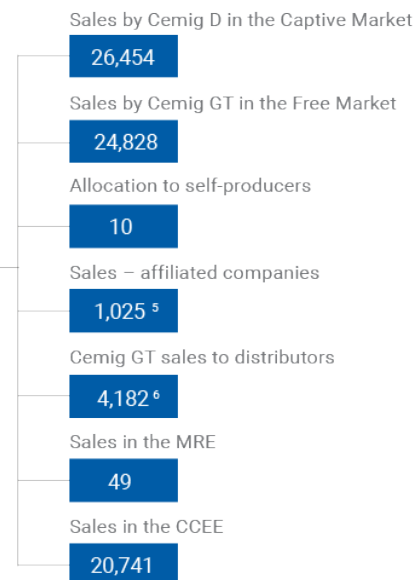
SOURCES AND USES OF ELECTRICITY – January to December 2015 – Cemig Group

TOTAL ELECTRICITY RECEIVED
83,750 GWh

Electricity Produced	14,665
Own Generation	14,355
Self-producers	–
Affiliated companies	597
Losses in national grid	(287)
Bought Energy	69,085
Itaipu	6,190
Regulated Contracts ¹	16,020
Bought in MRE ²	7,667
Bought on CCEE	12,609
Bilateral Contracts	17,067
CCEN	1,105
CCGF*	7,730
Received in local grid ³	34
Proinfa ⁴	663
Co-generation	–

DISTRIBUTION
83,750 GWh

Electricity Sold	77,289
Losses – distribution	5,933
Losses in national grid	528



Includes electricity received and delivered by the wholly-owned companies of the Cemig Group: Cemig D, Cemig GT, Capim Branco, Cemig PCH, Horizontes, Rosal, Sá Carvalho and TPP Barreiro. Excludes transactions between the companies.

¹ CCEARs = Electricity Sales Contracts in the Regulated Market.

² MRE = Electricity Reallocation Mechanism.

³ Generation input directly into the Distribution Network.

⁴ Proinfa = The Program to Encourage Alternative Sources of Electric Power.

⁵ 'Bilateral' Contracts made by the companies Sá Carvalho, Horizontes, Pai Joaquim, Rosal, and Barreiro and Ipetinga thermal plants.

⁶ Sales by Cemig GT in the Regulated Market (ACR).

* Physical Guarantee Quotas Regime.

RELATIONS WITH CORPORATE CLIENTS

Cemig's portfolio of corporate clients is a significant percentage in its sales of electricity, and consequently, the Company's revenue. In recent years this percentage has been approximately 40%.

The company seeks to increase its share in this market – in which it is already the leader, with approximately 22% market share – by employing a dedicated client service structure for the purpose.

The effort that Cemig applies in management of analysis of the risk of the business, and subsequent monitoring of the Company's corporate clients, and their respective economic sectors, is important since a retraction in the portfolio of clients could lead to a significant reduction in the company's net profit.

As a way of keeping ahead of such risks, the company holds periodic meetings of the Energy Risks Management Committee, which provide reports to the Board of Directors and the Executive Board. This also has the benefit of being monitored by internal and external audits.

Cemig's Energy Trading Policy provides guidelines for management, which are applied in the relationship with various types of clients, in contracts made in both the Free and Regulated Markets.

This policy requires presentations to be made to the Board of Directors in the last quarter of every year, on the following topics:

- forecasts for the various markets, and projections for average price and average tariff;
- forecasts for electricity purchased for supply to clients;
- forecast for Tariff Adjustments and Reviews, with average numbers, for a horizon of two Review Cycles;
- forecasts for average electricity prices in auctions and under 'bilateral' contracts;
- forecasts for the spot price; and
- strategies for mitigation of risk (including actions to be taken and/or products to be adopted), and criteria for

determination of situations of under- or over-contracting by Cemig D.

Other tools for management and monitoring are:

Reports of the Board of Directors, monitoring contracts rescinded and new contracts made: A report is prepared monthly containing contracts signed with value above R\$ 17,355,000, and any contracts canceled at the same value level – a way of monitoring how the management of clients is going, and the Company's gains or losses.

Client satisfaction survey: Every two years the Executive Board prepares a satisfaction survey of clients served at average and high voltage. These surveys assess aspects such as service, price of electricity, quality of the electricity supplied, client satisfaction, client service channels, and others.

Plans for action/improvements: Based on the results of the survey, the decision makers prepare a plan for improvements. A timetable is created and all the actions are monitored.

Every year, Cemig participates in various awards, certifications and recognition (Brazilian and international), on considerations that look at the Company's management policies, including trading.

Examples include the National Quality Prize, the Dow Jones index, and the Bovespa ISE index.

Complementary to these initiatives there are internal processes, such as the interventions by internal and external auditors to evaluate whether the processes are being carried out in accordance with the stipulated guidelines.

Increase in contracting of incentive-bearing supply – an effective means of bullet-proofing revenue in the concession area of Cemig D.

ENERGY CONSERVATION AND EFFICIENCY

EU7

Cemig's 'Smart Energy' (*Energia Inteligente*) Program

Through its *Energy Efficiency Program*, Cemig has been running projects to orient the population on optimal use of electricity since the 1980s, when the *Procel* (National Electricity Conservation) Program was created. In 2008, Aneel Resolution 300 required holders of distribution concessions and permissions to invest in energy efficiency; since then, Cemig has invested R\$ 370 million in putting new technologies in place, and the strengthening of a culture of rational use of electricity through activities to enhance awareness, and the use of more efficient equipment.

The program is based on providing incentives to change habits. It leads to reduction and elimination of waste through good practices while preserving natural resources. The projects of the program are targeted to low-income clients, non-profit institutions, municipal governments, the private sector and educational institutions. Standout initiatives under the program include: donation of solar water heating systems to replace electric showers; and replacement of obsolete autoclaves; exchange of incandescent bulbs for compact fluorescents, and inefficient tubular lamps for more efficient ones, in public and philanthropic hospitals.

Some key initiatives in 2015:

- *Replacement of showers with solar water heating systems in low-income housing developments:*

Two projects are currently under way: *Conviver Solar I* and *II*. In these projects, some 8,820 solar water heating systems have been installed in low-income housing developments, and 44,100 light bulbs have been replaced, for a total investment of some R\$ 24.4 million. Energy savings now total 3,780 MWh/year, with reduction of 2,998 kW in peak demand.

- *Replacement of showers with solar heating in public hospitals and philanthropic institutions:*

Installations were completed at seven public and philanthropic institutions in 2015, creating savings of 498 MWh/year and reduction of 1,463 kW in peak demand. Investment in 2015 was R\$ 2.1 million.

- *Replacement of showers with solar heating at care homes for the elderly:*

This project plans to install 20,800m² of solar collectors at 508 care homes in Minas Gerais. 31 systems were completed in 2015, saving 545 MWh/year, with demand reduced by 240 kW – for investment of R\$ 5.6 million.

- *The 'Living Together' Project (Projeto Conviver):*

This project was begun in 2006, with activities throughout Cemig D's entire concession area. It orients low-income clients on measures to take for energy efficiency. A total of R\$ 5.3 million was invested in 2015, providing help to more than 5,323 families – resulting in savings of 1,117 MWh/year, and reduction in demand of 402 kW. In 2015, a total of 2,711 refrigerators were replaced by new ones carrying the *Procel* seal; and 26,160 incandescent lamps were replaced by compact fluorescents. Cemig recycles the old refrigerators and lamps.

As well as helping reduce electricity losses by replacing obsolete equipment, the energy efficiency program offers another benefit to communities: rescue of citizenship, in that installation of an electricity meter gives the user an electricity bill, and thus a 'proof of address', thereby being useful for banking and bureaucratic transactions.

For further information on the program see:

http://www.cemig.com.br/en-us/Company_and_Future/Sustainability/Programs/Energy_Efficiency/Pages/default.aspx

In 2015, with investment of R\$ 58 million, Cemig complied with the regulatory requirement for allocation of investment totaling 0.5% of net operational revenues, plus certain amounts not recognized. Cemig invested approximately R\$ 29.7 million for low-income consumers.

This table summarizes the main projects executed in 2015:

ACTION	TARGET PUBLIC	QUANTITY	INVESTMENT IN 2015 – R\$	ENERGY SAVED (MWH/YEAR)	REDUCTION IN PEAK DEMAND (KW)	CO ₂ AVOIDED (TONS)
Replacement of electric showers with solar water heating	Low-income housing	8,820 systems; 44,100 lamps	24,348,264.61	3,780	2,988	336
Conviver Project – Orientation on electricity efficiency measures, replacement of equipment	Low-income clients	5,323 families; 2,711 refrigerators; 26,160 lamps	5,327,967.07	1,117	402	99
Replacement of electric showers with solar water heating	Long-term homes for the elderly	31 institutions	5,624,021.28	545	240	49
Replacement of electric showers with solar water heating	Public hospitals and philanthropic entities	7 hospitals	2,121,293.18	498	1,463	44
Photovoltaic solar plant	Industry	1 building	5,776.2	90	-	8
Modernization of lighting	Industry	1 building	429,250.8	287	89	26
Replacement of lighting system	Industry	1 building	2,000.00	268	43	24
Photovoltaic solar plant	Service provider	1 building	1,204,724.54	466	-	41
TOTAL			39,099,297.68	7,051	5,235	627

Efficientia

Since 2002, Cemig's wholly-owned subsidiary Efficientia has been implementing energy efficiency projects, as its main activity, through performance-based contracts.

In 2014 a project was begun at Patense Ltda. in *Itaúna, Minas Gerais*, focused on alteration of the process of generation of industrial steam for use in a 3MW coal generation plant (12,745 MWh/year), for investment of R\$ 15.5 million. This was expected to be concluded in February 2016.

In 2015, Efficientia signed a contract to install a coal generation plant using biomass at the company *Bem Brasil* in *Araxá, Minas Gerais*. This generating plant will have capacity for 7,500kW, and is planned to generate 54MWh/year. The cost of implementation of the plant is R\$ 42 million, with works beginning in 2016, for completion in 2017.

Additionally, the photovoltaic electricity generation projects developed by Efficientia are investments in distributed generation. In 2015, contracts were signed for supply of photovoltaic systems with the following clients:

- *Algar Tecnologia e Consultoria*: Development and implementation of a solar photovoltaic plant (expected generation 466 MWh/year). Investment: R\$ 2.2 million. Completed in 2015.
- *Village I and Village II Condominiums*: Development and implementation of a solar photovoltaic plant (expected generation 1,108 MWh/year). Investment: R\$ 6.1 million. Planned for completion in 2016 (Village I) and 2017 (Village II).
- *Algar Telecom*: Development and implementation of a solar photovoltaic plant (expected generation 734 MWh/year). Investment: R\$ 3.9 million. Planned for completion in 2016.

Some projects begun in 2015 are at the final phase of implementation, with start-up planned for 2016. Other projects have been negotiated with clients over the course of 2015, with works already begun and conclusion planned for 2016 or 2017, as shown below (in such cases, energy savings figures are based on preliminary diagnosis):

In all projects under Efficientia's management, the electricity savings are certified by application of Energy Performance Measurement and Verification (M&V) methodology in accordance with the International Performance Measurement and Verification Protocol.

In 2015 Efficientia signed electricity efficiency performance contracts with clients in the industrial and services sectors for implementation of projects to modernize lighting systems using LED technology:

- *Esdeva Indústria Gráfica*: Modernization of the industrial lighting system, using LED technology – expected savings 485 MWh/year; investment of R\$ 779,000;
- *Prosegur Brasil*: Modernization of the lighting system of the head office, using LED technology – expected savings 275 MWh/year; investment of R\$ 358,000;
- *Minas Tênis Clube*: Modernization of the head office illumination system using LED technology – expected saving 745 MWh/year; investment of R\$ 1.9 million.

The following energy efficiency projects were completed in 2015:

- *Tecidos Miramontes*: Development and implementation of a Solar Photovoltaic Plant (generation 90.50 MWh/year). Investment: R\$ 451,000
- *Natura*: Modernization of the industrial illumination system, using LED technology (expected savings 309 MWh/year). Investment: R\$ 434,000
- *KDB*: Replacement of the industrial lighting system – saving of 419 MWh/year; investment of R\$ 336,000.

The energy efficiency projects put in place by Efficientia, as well as saving energy, reduce power offtake at peak times for the electricity system, and are thus also demand-side management projects.

The photovoltaic generation projects are also investments in distributed generation. The investment scheduled for these projects in 2015 was R\$ 1.6 million.

In recent years Efficientia has completed several projects for clients in the sugar-alcohol industry that were installing or expanding plants in *Minas Gerais*. In 2015 works were completed on the connection of the *Santa Vitória* Thermolectric Plant to the grid, under the supervision of Efficientia. This is a co-generation sugarcane bagasse plant able to generate up to 20 MW.

To strengthen opportunities for new business, Efficientia launched a new website in 2014. A lighter layout and changes in the information architecture, reflecting internal changes in the company, help to further de-mystify the subject of energy efficiency – while enabling entirely new business models to be presented. Click [here](#) for more details.

MANAGEMENT OF LOSSES

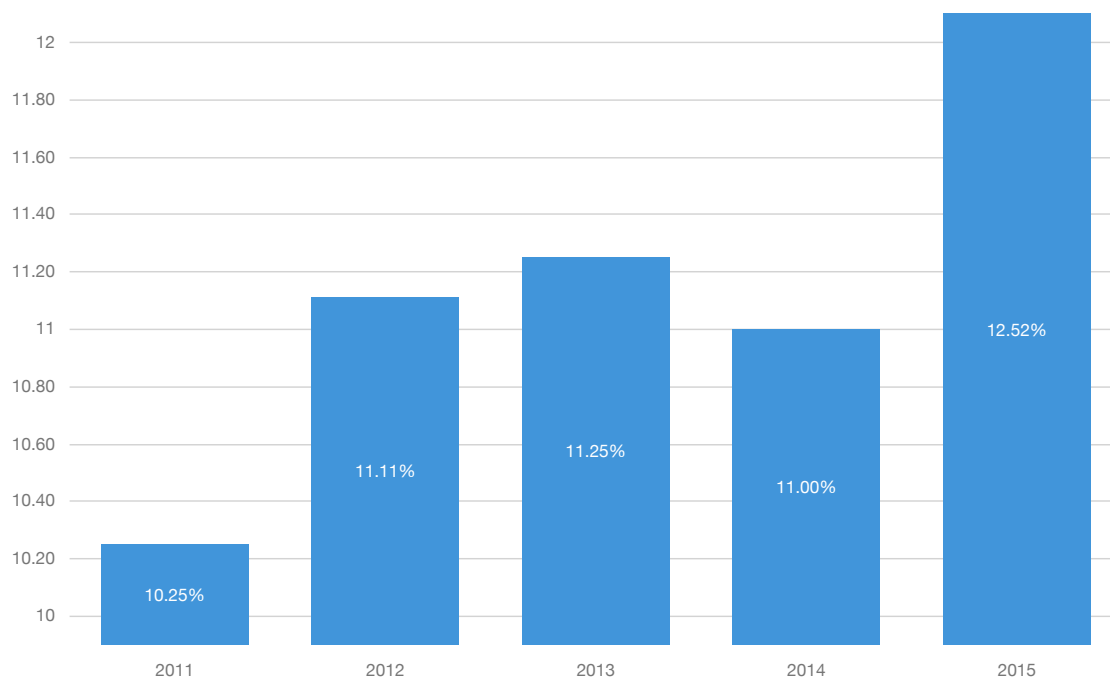
Controlling electricity losses is extremely important for distributors, in view of the various impacts associated with sustainability and the environment, protection of revenue, quality in electricity supply and safety of the public. Thus controlling electricity losses is one of Cemig's strategic goals, since they represent revenue foregone and, indirectly, impact the environment in ways such as increase in emissions of greenhouse gases.

Total Distribution Losses (*IPTD*) are accounted as the sum of Technical Losses (*PPTD*) and Non-Technical Losses (*PPNT*) – also referred to as commercial losses. Technical losses are inherent to the transport of energy through transmission and distribution lines and equipment. They are influenced by, among other factors, dispatch conditions at generating stations, works in progress on strengthening the network, behavior of the consumer market, and adoption of specific loss-reduction measures. Non-technical losses involve deficiencies or irregularities in measurement and/or billing of consumer units, and also clandestine connections to the distributor's network. Control of non-technical losses is fundamental for minimizing the company's financial losses, which are in part passed through to the tariff of those consumers who pay the correct amount, on time, during the process of tariff review, under a specific criterion established by *Aneel* (Submodule 2.6 of *Proret*).

In the mapping of risks related to management of losses, the principal risk associated with the subject is of the regulatory targets established by *Aneel* for the current tariff cycle (2013-17) not being met. This is a significant risk in view of the challenging limits imposed by *Aneel* in the last tariff review, resulting from adoption of simplified statistical models for the calculation of technical and non-technical losses. Additionally, the recent changes made by the federal government in the electricity sector, which culminated in successive tariff adjustments, and the present Brazilian macroeconomic scenario of recession (falling GDP, increasing inflation and interest rates) impose budgetary restrictions on application of the investments and controls that are necessary, and also signal the possibilities of an increased percentage of non-technical losses of electricity.

In the calculation of indices of losses, total distribution losses (i.e. *IPTD*) were 12.52% in 2015, compared to a regulatory target of 10.76%. In deciding this target during the Third Tariff Review Cycle, in 2008, *Aneel* made significant changes to the methodology of calculation of technical losses, imposing limits that were challenging for Cemig. Since improvement of results depends on both manageable and non-manageable factors, Cemig will continue to make efforts to improve the manageable factors, to meet the target. Approaches to the manageable factors include: study for proposals to reconfigure the high-voltage line system, focusing on reducing technical losses; participation in an overall, integrated planning of the electrical system, analyzing the reduction in technical losses provided by structural works; executing the medium voltage reactive compensation plan, with installation of 225 automatic capacitor banks; checking the regularity of consumers' metering equipment through on-site inspections; and replacement of obsolete or non-standard meters. Non-manageable factors include: north-south flows; reservoir levels; and load seasonality.

Total Losses in Distribution



In 2015, *PPTD* (technical losses) was 9.45%, compared to a target of 7.84%, and *PPNT* (non-technical losses) was 3.07% compared to a target of 3.03%.

Anel measures non-technical losses with reference to the low-voltage market. Taking this into account, the result for *PPNT* in relation to the low voltage market as invoiced in 2015 was 7.85%, for a regulatory target of 7.63%.

Two actions taken in 2015 to minimize technical losses are highlighted:

- Investment in works to strengthen the medium and low voltage electricity system, for a total of R\$ 65.8 million; and investment of R\$ 219.4 million to expand and strengthen the sub-transmission system (69 to 230 kV).
- The medium-voltage reactive compensation project: Preparation of a reactive compensation plan, for installation of 225 banks of automatic capacitors by 2016, (projected investment of R\$ 9.0 million), with planned reduction of R\$ 2.0 million in associated technical losses (corresponding to 9.4 GWh) per year.

Other action in the year has included: Prospecting of new network and conductor technologies; studies for circuit reconfiguration to increase the operating efficiency of the electricity system; and establishment of criteria for limiting levels of technical losses in medium and low voltage circuits.

The actions avoided generation of 3,197.4 tons of CO₂.

To reduce non-technical losses, R\$ 9.3 million was invested in 2015 (through November) in inspection programs of 58,000 consumer units with suspected irregularities. Taking into account the potential for collection of payment for past supply and added future revenue resulting from regularization, Cemig estimates the gain from this campaign at R\$ 80 million (corresponding to 126 GWh).

The actions avoided generation of 20,729.4 tons of CO₂.

Other important aspects of the efforts in 2015 to reduce non-technical losses:

- The system of selection of target consumers for inspection at medium and low voltage was improved, including: 'bulletproofing' of revenue from medium- and large-sized remote-measured consumers (this meant 'bulletproofing' of approximately 45% of Cemig D's total revenue).

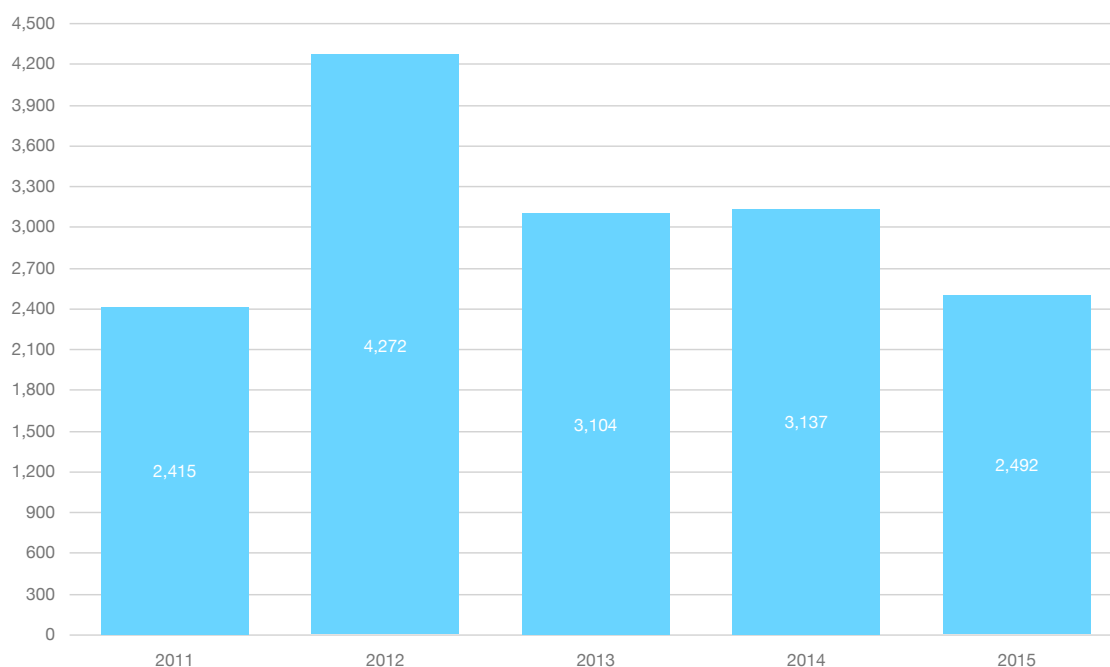
- Success rate for inspection targets achieved 34% (up from 27% in 2014).
- Quality and productivity of the process of charging and collection for irregular consumption was improved by automation of the systems of calculation, and management of an irregularity points system: a total of 25,904 calculations of irregularities were made; the index of compliance was 98.97%; and the average productivity per analyst was 31 calculations/day.
- Modernization of the measurement park through the replacement of 140,000 non-standard and obsolete meters, with investment of R\$ 10.87 million, representing an increase in revenue of R\$ 1.66 million (corresponding to 3,257 MWh).
- Cemig's Commercial Losses Prevention Task Force continued to work with Civil and Military police departments, the Public Prosecutor's Office, government and the press, to regularize clandestine connections. Sixty large-scale-consumption fraud operators were subjected to criminal proceedings in the year; 70 news items appeared in the communications media, all raising awareness among society at large about the damage caused by illegal connections.

FINANCIAL RESULTS

NET PROFIT

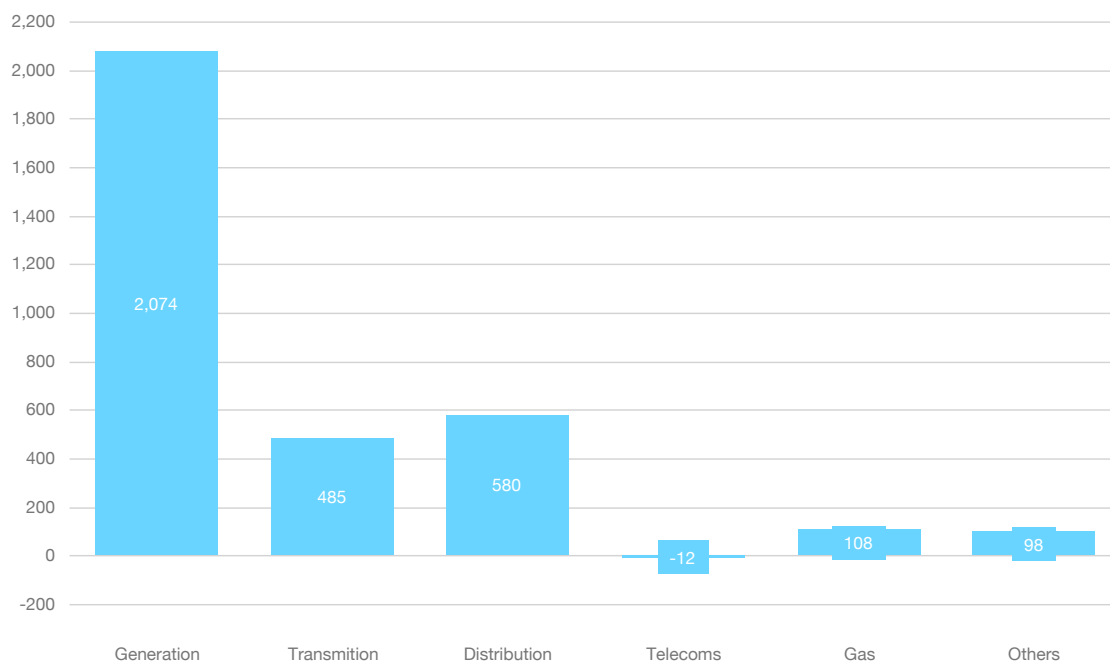
DMA Cemig reported net profit of R\$ 2.492 billion for 2015, which compares to net profit of R\$ 3.137 billion for 2014 – a year-on-year reduction of 20.56%.

Net profit – R\$ mn



Net profit by sector of operation:

Profit (loss) by activity – R\$ mn



OPERATIONAL REVENUE

Operational revenue breaks down as follows:

OPERATIONAL REVENUES			
R\$ '000	2014	2015	CHANGE %
Revenue from supply of electricity (a)	17,232,105	22,526,275	30.7%
Revenue from use of the electricity distribution systems (TUSD) (b)	854,945	1,465,399	71.4%
CVA, and Other financial components in tariff calculations (c)	1,106,675	1,703,627	-
Transmission revenue			
Transmission concession revenue (d)	556,633	261,470	-53.0%
Transmission construction revenue (e)	80,358	146,030	81.7%
Transmission indemnity revenue (f)	420,013	100,528	-76.1%
Distribution construction revenue (e)	861,437	1,105,806	28.4%
Transactions in electricity on the CCEE (h)	2,348,483	2,424,567	3.2%
Supply of gas	422,379	1,666,688	294.6%
Other operating revenues (h)	1,282,230	1,441,186	12.4%
Taxes and charges applied to Revenue (i)	-5,625,680	-11,549,365	105.3%
Net operational revenue	19,539,578	21,292,211	9.0%

Revenue from supply of electricity

Revenue from total sales of electricity in 2015 was R\$ 22.526 billion – or 30.72% more than in 2014, when this revenue was R\$ 17.232 billion.

Final consumers

Total revenue from electricity sold to final consumers, excluding Cemig's own consumption, was R\$ 20.319 billion in 2015 – or 36.17% more than in 2014 (R\$ 14.922 billion).

The main factors in this revenue in 2015 were:

- The annual tariff adjustment for Cemig D, resulting in an average increase for consumer tariffs of 14.76%, effective from April 8, 2014 (full effect in 2015).
- The Extraordinary Tariff Adjustment (*RTE*) for Cemig D, which resulted in an average increase in consumers' tariffs of 28.76%, applicable from March 2, 2015.
- An annual tariff adjustment, resulting in average increase for consumer tariffs of 7.07%, effective from April 8, 2015.
- Creation, in 2015, of the 'Tariff Flag' mechanism, at the following rates per 100 kWh consumed: (i) From January 2015, R\$ 1.50 per 100 kWh for the Yellow Flag tariff, and R\$ 3.00 for the Red Flag tariff; (ii) as from March 2015, R\$ 2.50 per 100 kWh for the Yellow Flag tariff and R\$ 5.50 for the Red Flag tariff; and finally (iii) from September 2015, R\$ 2.50 for the Yellow Flag tariff and R\$ 4.50 for the Red Flag tariff. The Red Flag rates were in effect for the whole of 2015.
- Volume of electricity sold in 2015 was 10.35% lower than in 2014.

OTHER REVENUES

R\$ '000	2014	2015	Change %
Charged service	11,136	13,504	21.3%
Telecoms services	134,672	133,894	-0.6%
Services rendered	117,767	130,687	11.0%
Subsidy payments received	790,011	995,616	26.0%
Rental and leasing	80,707	93,119	15.4%
Others	147,937	74,366	-49.7%
Total	1,282,230	1,441,186	12.4%

OPERATIONAL COSTS AND EXPENSES

Operational costs and expenses, excluding Financial revenue (expenses) in 2015 were R\$ 18.318 billion, 26.76% more than in 2014 (R\$ 14.451 billion). There is more on the breakdown of Operational costs and expenses in Note 25.

concession in the period, and is fully offset by the line *Construction revenue*, in the same amount.

EBITDA (EARNINGS BEFORE INTEREST, TAX, DEPRECIATION AND AMORTIZATION)

Cemig's Ebitda 

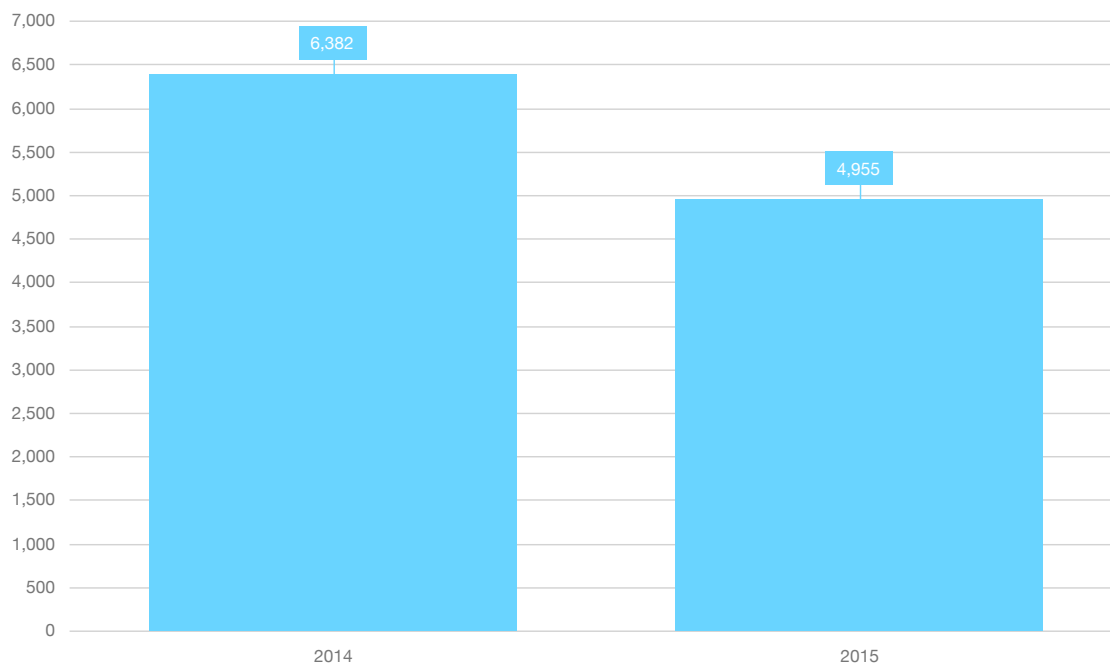
Ebitda is a non-accounting measure prepared by the Company, reconciled with its financial statements in accordance with the specifications in CVM Circular SNC/SEP 01/2007 and CVM Instruction 527 of October 4, 2012. It comprises: net profit, adjusted for the effects of net financial revenue (expenses), depreciation, amortization and income tax and the Social Contribution tax. Ebitda is not a measure recognized by Brazilian GAAP nor by IFRS; it does not have a standard meaning; and it may be non-comparable with measures with similar titles provided by other companies. Cemig publishes Ebitda because it uses it to measure its own performance. Ebitda should not be considered in isolation or as a substitution for net profit or operational profit, nor as an indicator of operational performance or cash flow, nor to measure liquidity nor the capacity for payment of debt.

was

22.36% lower in 2015 than 2014:

EBITDA – R\$ MILLION	2014	2015	CHANGE %
Net profit for the period	3,137	2,492	-20.6%
+ Income tax and Social Contribution tax	1,343	893	-33.5%
+ Financial revenue (expenses)	1,101	735	-33.2%
+ Depreciation and amortization	801	835	4.2%
EBITDA	6.382	4.955	-22,4%

EBITDA (R\$ million)



Cemig's 2015 Ebitda was 22.36% lower than in 2014. This mainly reflected operational costs and expenses (excluding depreciation and amortization) 28.08% higher in 2015 – among which a significant item was a provision of R\$ 1.401 billion made in 2015, as indicated in more detail below, and increased cost of electricity purchased for resale.

In line with the lower Ebitda, the Ebitda margin was lower, at 23.27%, in 2015, than in 2014 (32.66%) – a reduction of 28.75% if expressed in terms of the number of percentage points.

INCOME TAX AND SOCIAL CONTRIBUTION TAX

In 2015, the expense on income tax and the Social Contribution tax totaled R\$ 893 million, on pre-tax profit of R\$ 3.384 billion, an effective rate of 26.39%.

In 2014, the expense on income tax and the Social Contribution tax totaled R\$ 1.343 billion, on pre-tax profit of R\$ 4.479 billion, an effective rate of 29.98%. There is a reconciliation of these effective rates with the nominal tax rates in the Explanatory Note 10 of the *"Demonstrações Financeiras Padronizadas 2015 – DFP"* (Standardized Financial Statements) – see this document at Company's website.

NET FINANCIAL REVENUE (EXPENSES)

Cemig reports Net financial expenses of R\$ 735 million in 2015, compared to net financial expenses of R\$ 1.101 billion in 2014. The main factors in Financial revenue (expenses) are in Note 26 to the financial statements (*DFP*).

LIQUIDITY AND CAPITAL RESOURCES

Cemig's business is capital-intensive. Historically, the Company has needed capital to finance the construction of new generation facilities and expansion and modernization of the existing generation, transmission and distribution facilities. Liquidity requirements are also affected by the dividend policy. Cemig finances its liquidity and capital needs principally with cash generated by operations and, on a lesser scale, with funds raised from external sources.

On December 31, 2015 the Company's consolidated current liabilities exceeded its consolidated current assets by R\$ 3.709

billion. The reason for this working capital deficiency was, primarily, new financings with short-term maturities for the Company's Investment Program, and transfer of debentures from long term to short term, associated with the provision for dividends and Interest on Equity of R\$ 1.068 billion in December 2015 and the provision for loss on put options of R\$ 1.245 billion.

Management monitors the Company's cash flow, and for this purpose assesses measures to adjust the current situation of its financial assets and liabilities to the levels considered appropriate to meet its needs. Negotiations are in progress with financial institutions for rollover of the debt becoming due in 2016, and its replacement with long-term maturities.

CASH AND CASH EQUIVALENTS

On December 31, 2015 neither Cemig's cash nor cash equivalents were held in any other currencies than the Real.

Cash and cash equivalents at December 31, 2015 totaled R\$ 925 million, compared to R\$ 887 million on December 31, 2014.

Below are the main factors in this variation:

Cash flow from operational activities

The totals of Net cash generated by operational activities in 2015 and 2014 were, respectively, R\$ 3.007 billion and R\$ 3.734 billion. Net cash from operational activities being lower in 2015 than 2014 is mainly due to the low net profit in 2015, after adjustment for items not affecting cash. Net profit adjusted for items not affecting cash flow in 2015 was R\$ 3.998 billion, or 29.15% lower than the figure of R\$ 5.643 billion for 2014.

Cash used in investment activities

The Company used net cash of R\$ 3.217 billion in investment activities in 2015, compared to net cash of R\$ 4.299 billion used in investment activities in 2014. This mainly represents the acquisitions of equity interests in 2014, in which the highlights were *Renova*, *Madeira Energia* and *Gasmig*. See more details in Explanatory Note 14.

Cash flow in financing activities

Net cash generated by financing activities in 2015 totaled R\$ 247 million, comprising amortizations of financings totaling R\$ 4.696 billion, and payments of R\$ 796 million in dividends and Interest on Equity, partially offset by inflow of funds from financings totaling R\$ 5.739 billion.

Net cash flow consumed by financing activities in 2014 totaled R\$ 750 million, comprising amortizations of financings totaling R\$ 1.394 billion, and payments of R\$ 3.917 billion in dividends and Interest on Equity, partially offset by receipt of funds from financings totaling R\$ 4.562 billion.

Funding and debt management policy

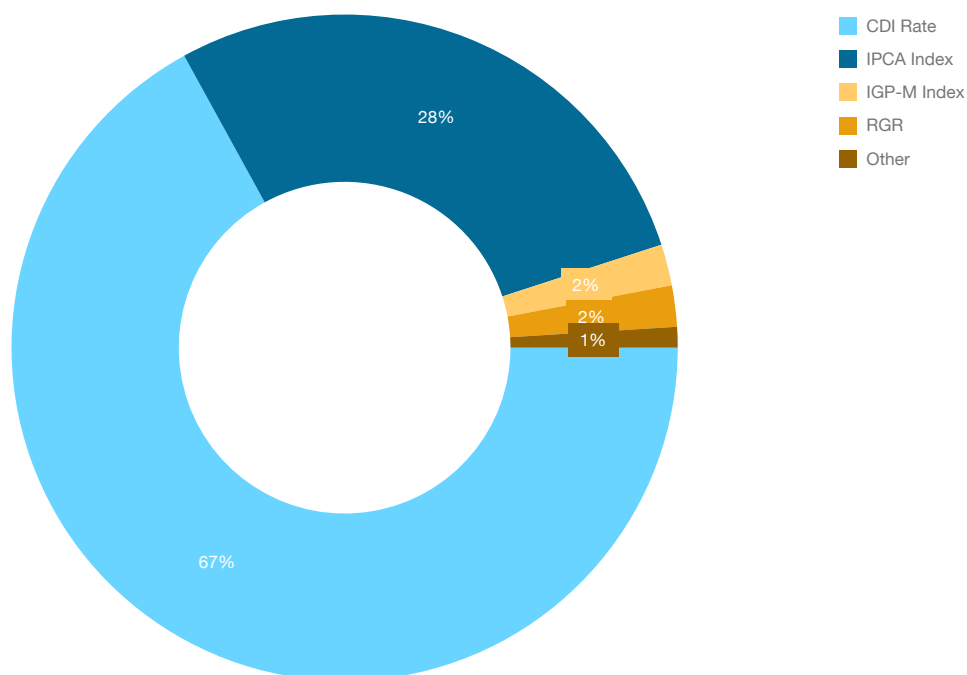
Cemig seeks to maintain its credit quality at levels denoting low credit risk, to enable it to benefit from financial costs that are compatible with the profitability of the business, and to show that the process of expansion of Cemig's activities is being carried out in a sustainable way.

A total of R\$ 5.739 billion was raised in 2015, mainly to finance the first tranche of the Concession Grant Fee for the plants of Lot D won in the Aneel auction, and for amortization of loans contracted in previous years.

The details of funding raised, including costs and maturities, are given in the Explanatory Note 19 of *DFP*.

The composition of Cemig's debt is a reflection of the sources of funding available to its subsidiaries – bank credit, used for rolling over of debt; and issues of debentures and notes, in which a significant demand has been allocated in issues indexed to the local interest rate – and also its intention to avoid exposure to debt in foreign currency (currently 0.31% of its total debt). The average cost of Cemig's debt is 3.74% p.a. in real terms (14.28% in nominal terms) at constant prices.

Indexor of debt at December 31, 2015



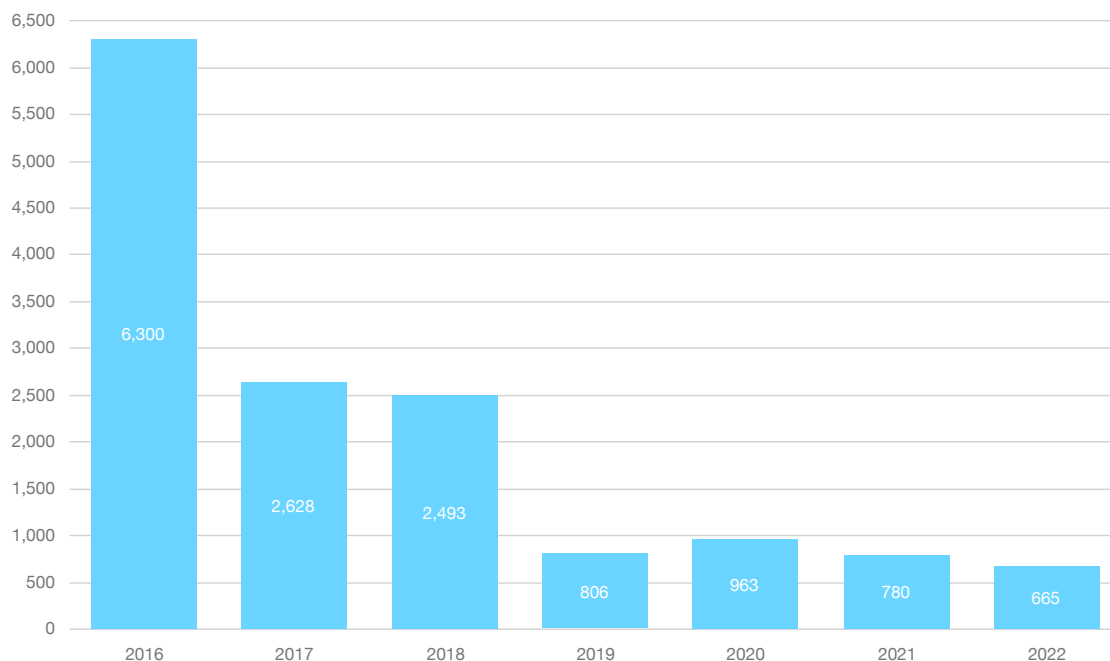
The Company's debt management centers on:

- lengthening of tenors;
- limitation of indebtedness to the levels specified by the by-laws:
 - Net debt/Ebitda \leq 2;
 - Net debt/(Stockholders' equity + Net debt) \leq 40%;
- reduction of the cost of financing; and
- preservation of the Company's payment capacity, while avoiding any pressures on cash flows that might suggest refinancing risk.

Cemig's consolidated total debt at December 31, 2015 was R\$ 15.167 billion, with average tenor of 2.8 years. The maturities in 2016 arise from the short-term transactions made in 2015. The company is in negotiations with financing agents for refinancing, over the long term, of its debt becoming due in 2106.

This chart shows the debt amortization timetable at December 2015:

Debt maturities timetable (R\$ million)



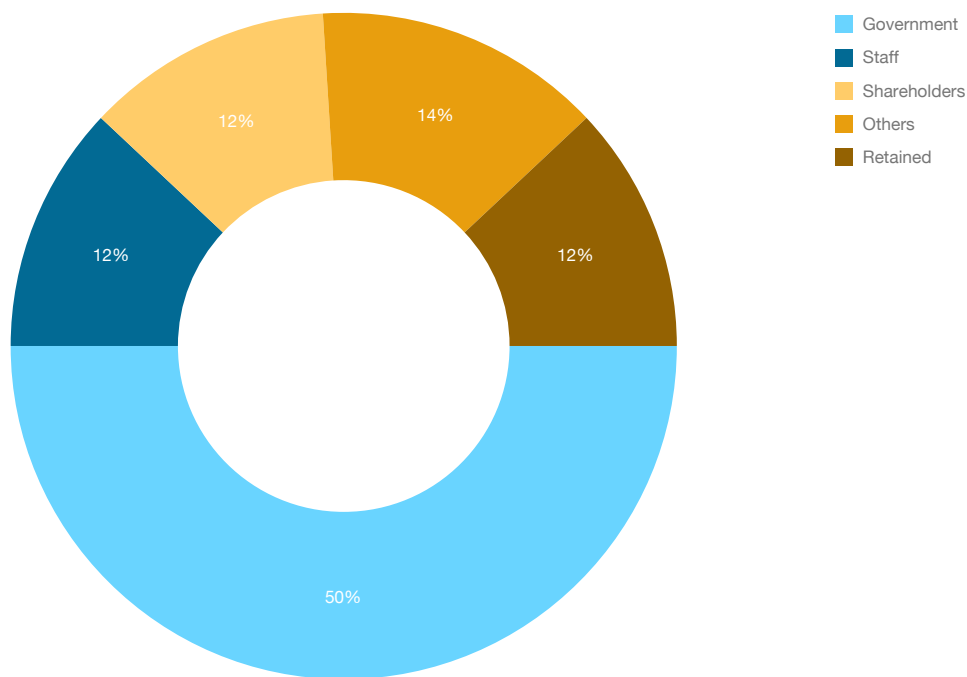
In 2015 the risk rating agencies made changes to their ratings for Cemig reflecting the deterioration of the Country's economic situation. In December Standard & Poor's downgraded its Brazilian ratings for Cemig and its subsidiaries, from brAA+ to brAA-, and its global ratings from BB+ to BB. Fitch, in July, also downgraded its Brazilian rating for the Cemig companies from AA(bra) to AA-(bra). Moody's maintained its Brazilian rating for the Cemig companies at Aa2.br and its global rating at Ba1. In December it placed them under review for a possible downgrade.

In February 2016, Standard & Poor's reduced its Brazilian rating for Cemig and its subsidiaries from brAA- to brA, and its global rating from BB to BB-, as a consequence of the downgrading of sovereign risk; in the same month Moody's reduced its Brazilian rating of Cemig and its subsidiaries from Aa2.br to A2.br, and its global ratings from Ba1 to Ba3.

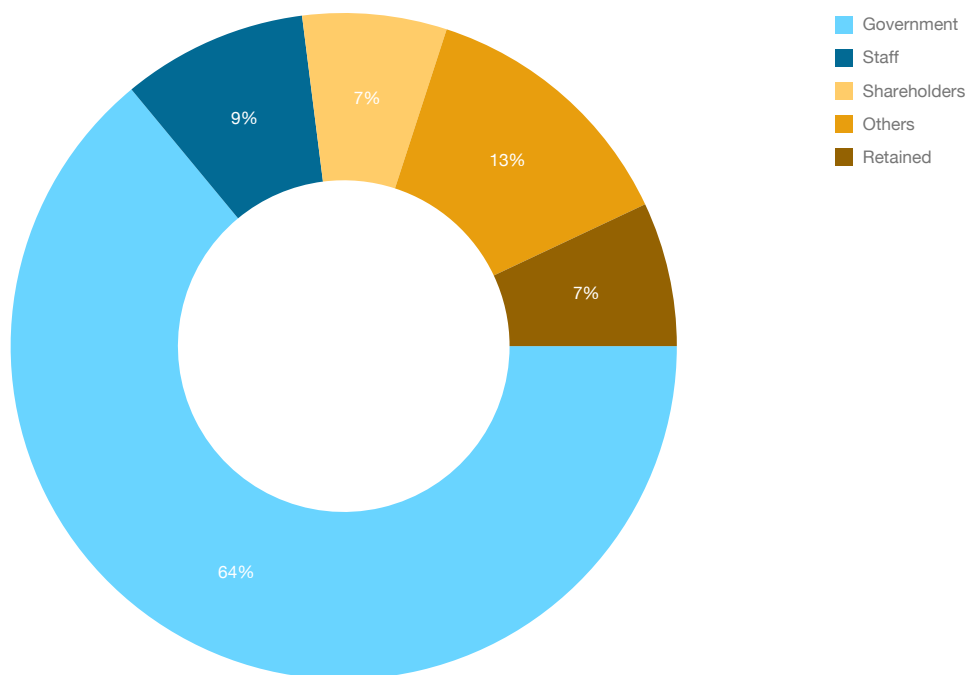
DISTRIBUTION OF ADDED VALUE

The Value Added Statement is an indicator of the Company's importance for society in general, and its generation of wealth: the added value created in 2015 was measured as R\$ 18.188 billion, compared to R\$ 13.209 billion in 2014.

Distribution of Added Value - 2014



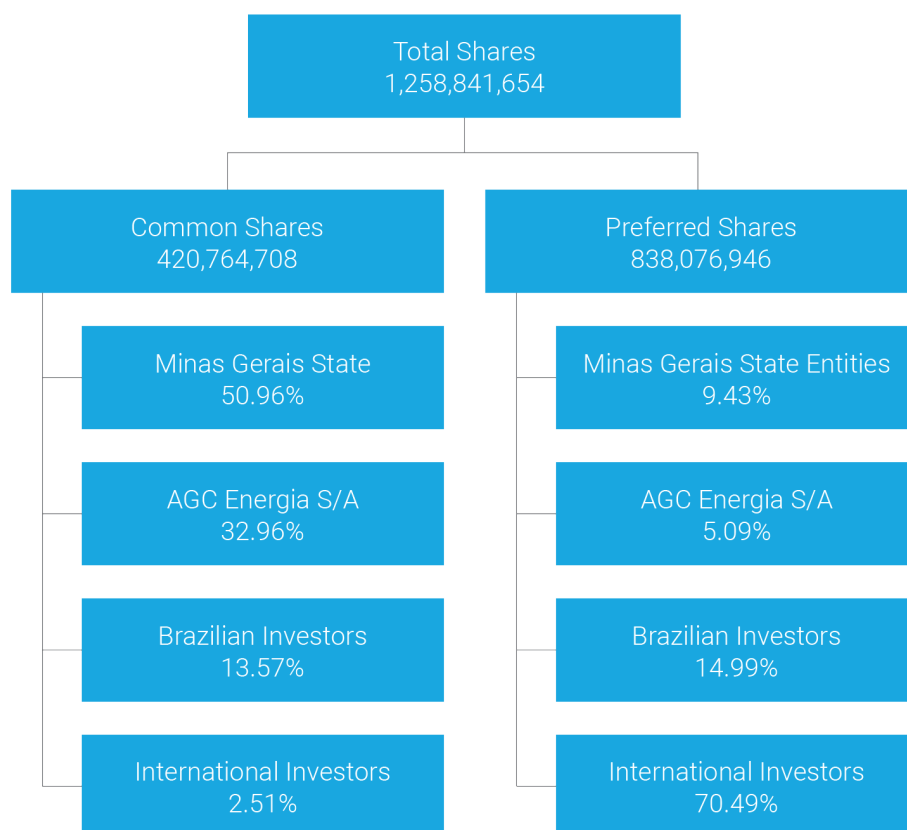
Distribution of Added Value - 2015



CAPITAL MARKETS AND DIVIDENDS

Cemig's shares were initially listed on the stock exchange of *Minas Gerais* State on October 14, 1960, and have been traded on the São Paulo stock exchange (Bovespa) since 1972 – under the tickers CMIG3 for the ON (common) shares, and CMIG4 for the preferred (PN) shares. Since October 2001 Cemig has been listed at Corporate Governance Level 1 on the São Paulo stock exchange (Bovespa). ADRs for Cemig shares have traded on the New York stock exchange (tickers CIG and CIG/C) since 1993 – initially at Level 1, and since 2001 at Level 2; and Cemig shares have traded on the Madrid stock exchange (as XCMIG) since 2002.

Cemig's share capital on December 31, 2015 totaled R\$ 6.294 billion, owned as follows:



Share prices

The closing prices of Cemig's securities in São Paulo (Bovespa), New York (NYSE) and Madrid (Latibex) in 2014 and 2015 were as follows:

SECURITY	TICKER	CURRENCY	CLOSING OF 2014	CLOSING OF 2015
Cemig PN	CMIG4	R\$	12.40	5.97
Cemig ON	CMIG3	R\$	13.03	6.28
ADR PN	CIG	US\$	4.60	1.46
ADR ON	CIG.C	US\$	5.11	1.74
Cemig PN (Latibex)	XCMIG	Euro	4.01	1.43

Source: Economática – prices adjusted by corporate action, including dividends.

Total trading volume in the preferred shares, CMIG4, in 2015 was R\$ 11.17 billion, a daily average of approximately R\$ 45.4 million. With this volume, though lower than the previous year, Cemig's preferred shares (PN) are still among the most traded on the Bovespa, providing investors with security and liquidity.

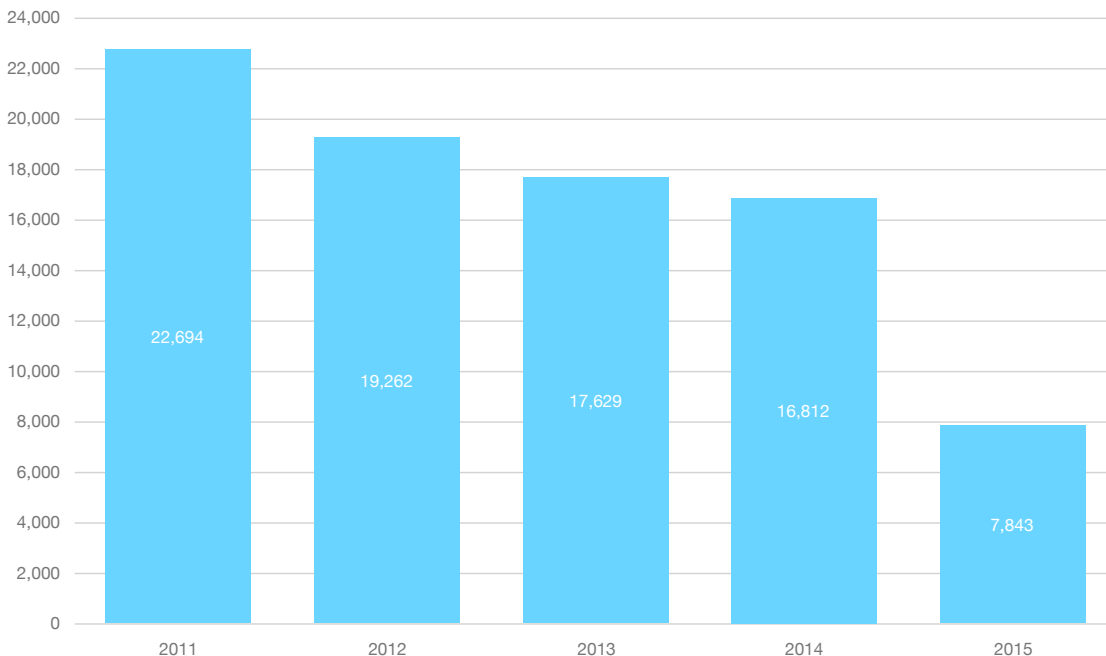
It can be pointed out that the average daily trading volume representing the preferred shares on the New York stock exchange was the equivalent to the volumes traded in the Brazilian market when converted into Reais – underlining Cemig's position as a global investment option. In 2015 the ADR for the PN shares (CIG) traded US\$3.07 billion, with a daily average of approximately US\$12.2 million.

The prices of both of Cemig's shares that trade on the Bovespa significantly underperformed the index for the Brazilian electricity sector – the IEE – in 2015 as shown in the table below. This mainly reflected the very significant impact on the Company's share prices from the judgment against Cemig GT in the court action on the *Jaguara* Plant in the Higher Appeal Court (STJ), even though the case has subsequently gone to the Federal Supreme Court (STF). Other factors affecting the

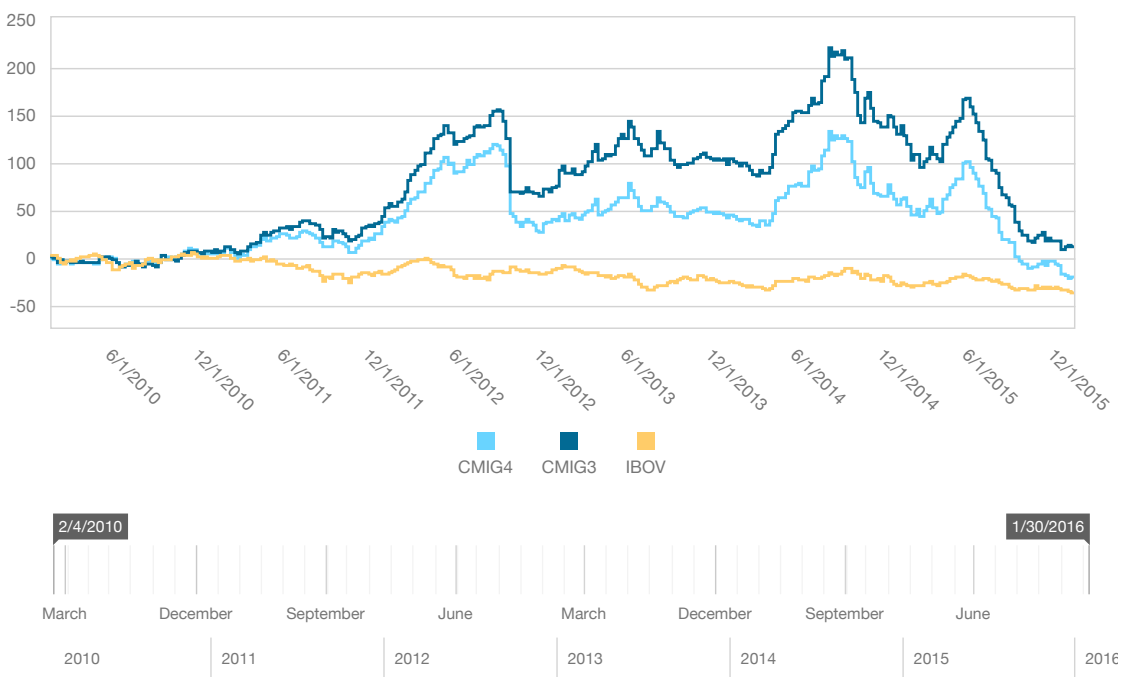
stock price in the year included: designation by the Mining and Energy Ministry, published on September 15, of Cemig GT as responsible for operation of the *São Simão* hydroelectric plant under the quota regime; the fall in electricity consumption; the Brazil-wide water supply crisis; and the country's macroeconomic situation – which increased the costs of rollover of debt.

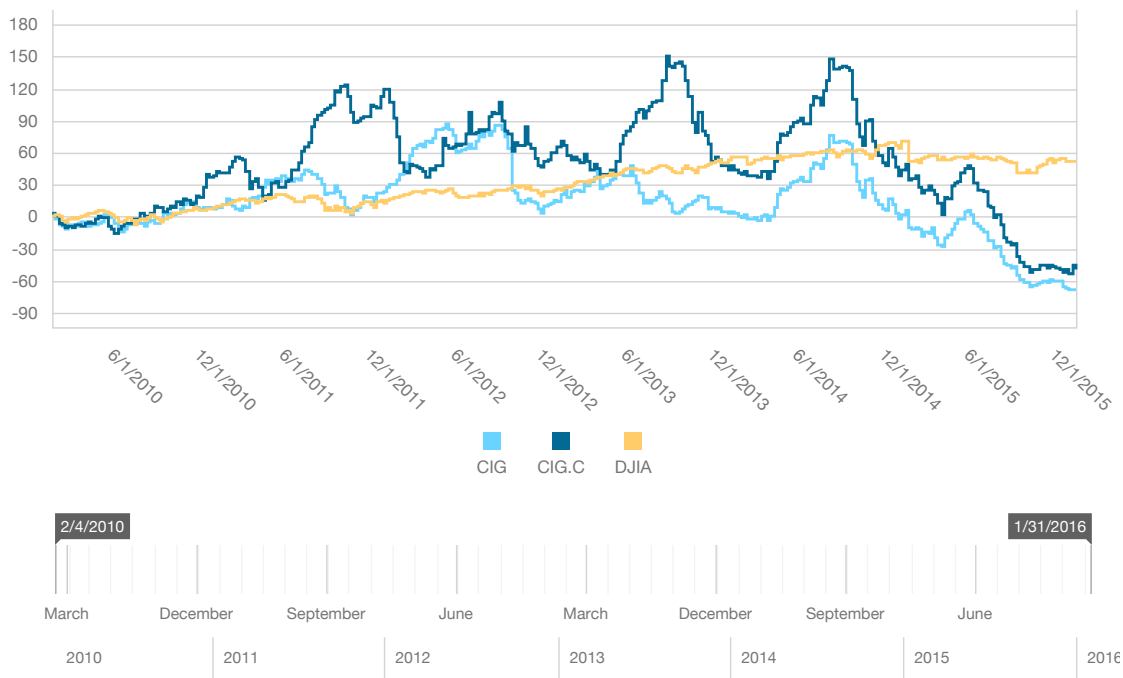
Market capitalization is calculated as the totality of the company shares at market price on the closing day of each year.

Cemig - Market Capitalisation (R\$ million)



These charts show changes in our stock prices over recent years, compared to the Bovespa Index - IBOV and the Dow Jones Industrial Average - DJIA:





Dividend payment policy

In its by-laws Cemig assumes the undertaking to distribute, every year, a minimum dividend of 50% of the net profit for the previous year. Additionally, extraordinary dividends can be distributed each two years, or more frequently, if cash availability permits.

Dividends are usually paid in two equal installments: the first by June 30 and the second by December 30 of the year subsequent to the year for which they are calculated.

Proposal for allocation of net profit

The Board of Directors decided to propose to the Annual General Meeting to be held by April 30, 2016 that the profit for 2015 of R\$ 2,491 million and the balance of Retained earnings, of R\$ 59.5 million should be allocated as follows:

- R\$ 633.9 million as minimum obligatory dividends, to stockholders, as follows:
 - R\$ 200 million in the form of Interest on Equity, to be paid in two equal installments, by June 30 and December 30, 2016, to stockholders whose names were on the Company's Nominal Share Registry on December 26, 2015;
 - R\$ 433.9 million in the form of dividends for the 2015 business year, to be paid by December 30, 2016 to stockholders whose names are on the Company's Nominal Share Registry on the date on which the Annual General Meeting is held;
- R\$ 633.9 million to be held in Equity in the Reserve for obligatory dividend not distributed, to be paid as and when the Company's financial situation permits;
- R\$ 1,262.2 million to be held in Equity in Retained earnings, to provide funding for the Company's planned investments in 2016 in accordance with a capital budget; and
- R\$ 20.6 million to be held in Stockholders' equity in the Tax incentives reserve, for tax incentive amounts gained in 2015 due to investments in the region of *Sudene*.

CEMIG'S INTERNAL PUBLIC

DMA

As part of its continuous improvement in organizational performance, Cemig's management of its internal public centers on development, analysis and improvement of its staff, corporate structure and working conditions, while being at all times focused on employee well-being and safety. In 2015 Cemig carried out a complete review of its entire human resources strategy. The aim of this strategy is to create and monitor policies and initiatives that result in people management which adds value to the organization, based on its principle of valuing the human being: construction of this new model was based on the principle that people are the main strategic asset, and it is they who are responsible for corporate sustainability.

Cemig's **Human Resources Policy** creates and disseminates a people management model designed to attract and retain a workforce that is attuned to and can work with the corporate strategy. The pillar of sustainability of this policy is in the incentive to personal and professional growth, and construction of practices of dialogue with and respect for the employees, in harmony with Cemig's Statement of Ethical Principles and Code of Professional Conduct, and its Social Responsibility Policy.

The Manual of Internal Instructions is a key guideline for management, with standard orientations on recruitment and selection, administration of jobs and remuneration, attendance, work accidents, and other subjects, with instructions available for all employees.

Continuing the initiative begun in 2014, a new Internal Mobility Procedure has been put in place: the Opportunities Bank. This is a permanent channel to encourage mobility of employees between areas, aiming to reconcile people's objectives with corporate needs, matching job candidates' educational qualifications, profiles and expectations to professional careers and locations within the organization.

The Jobs and Remuneration *Plan* and the Cemig Career Plan are being restructured to attract, develop and retain the best professional talents necessary for the conducting of Cemig's business, alignment of the corporate objectives, and for the competitiveness and longevity in the sector in which it operates.

Internal selection is the process by which the Company enables employees to find advancement within the same career, resulting in promotions while meeting the needs of vacancies that occur. It is an important motivational instrument for the employees: the opportunity for promotion in one's career helps retain talented individuals, encourages professionals' development and increasing levels of qualification, and provides a long-term vision with prospects for growth – quite the opposite of the prospect of professional stagnation – while providing return on the Company's investment in training and development of its staff.

As one more instrument to develop more respectful, healthy, democratic and fair personal relationships within the Company, and in harmony with the policy of encouraging people's growth and attribution of value to individuals, in 2015 Cemig created the Cemig Women's Committee. This group aims to provide spaces for consideration and reflection on human relations in the working environment, opening up more scope for the presence, and voice, of women.

Another highlight in 2015 was the creation of the Integrated Work Accidents Risk Prevention Group, which aims to set and ensure construction of a work health and safety strategy enabling the necessary action to be taken to achieve the target of zero tolerance for serious and/or fatal accidents. One of the steps taken was Cemig's affiliation to the Ibero-American Work Health and Safety Group, and the non-profit technical cooperation working agreement signed with the Ibero-American Social Security Organization (*OISS*), an international entity assisting Latin American countries and all those connected with the

Portuguese and Spanish languages in implementing and monitoring preventative actions in Work Health and Safety.

Although the current moment is not a strong one for Brazil's economy, or for the electricity sector, the organization maintains permanent efforts to encourage formation and development of equality of opportunities, based on respect for constitutional, legal, environmental and social precepts, and guided by ethics, transparency, and mutual respect in working relationships.

PROFILE OF CEMIG'S STAFF

G4-10

LA1

LA12

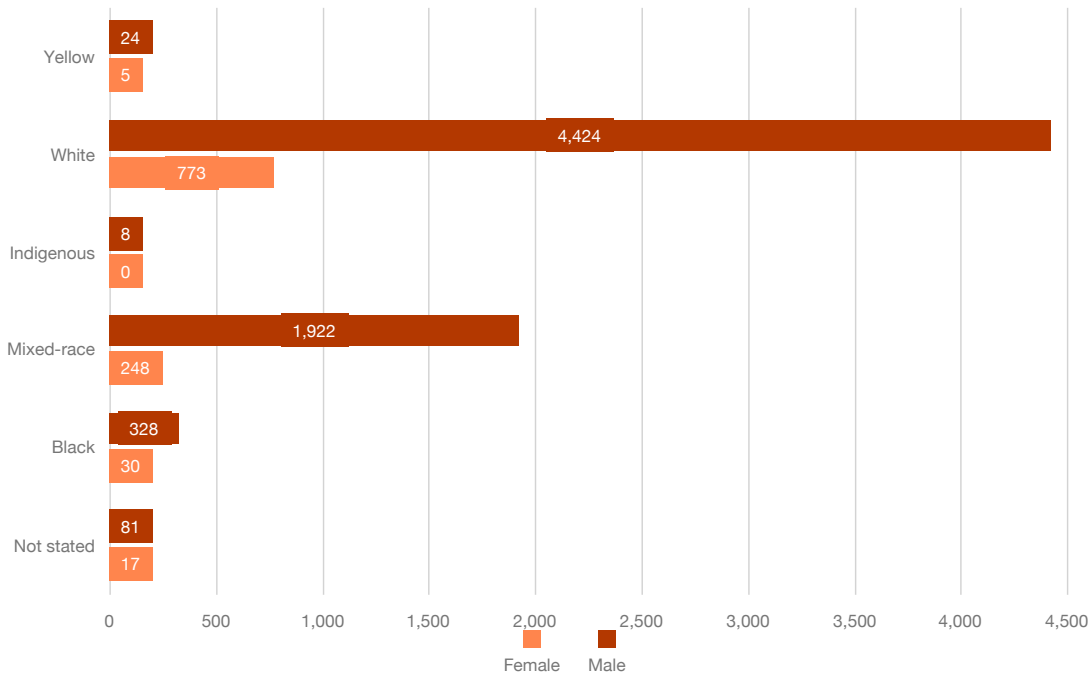
Cemig's management of staff includes managing the contracts and working relationships of employees contracted as Temporary Labor, under-age registered apprentices, and interns. Temporary Labor Contracts are made for specific and temporary conditions, where there is no possibility of filling the vacancy in any other way, with work for a defined period. Cemig's Intern Program aims to provide opportunities for professional development to students of technical and university courses by association of theory and practice. The *Cemig Apprentices Program* provides teenagers from non-privileged backgrounds with development of new competencies, through a professional apprenticeship, under supervision of tutors who are employed at Cemig.

This table gives a profile of Cemig's staff:

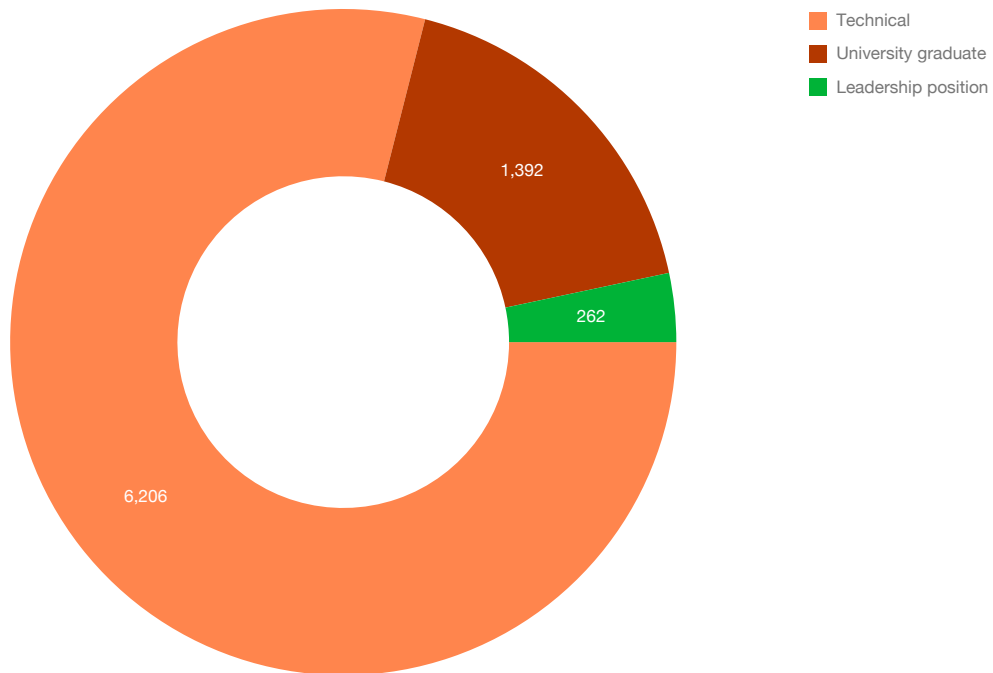
CEMIG'S OWN STAFF						
Year	Leadership Positions		University Level		Technical Level	
	Male	Female	Male	Female	Male	Female
2015	229	33	1,099	293	5,459	747
	262		1,392		6,206	
2014	212	29	1,050	288	5,572	770
	241		1,338		6,342	
2013	212	31	1,053	290	5,614	721
	243		1,343		6,335	
Year	Total					
	Male			Female		
2015	6,787			1,073		
	7,860					
2014	6,835			1,087		
	7,922					
2013	6,880			1,042		
	7,922					
TEMPORARY						
Year	Temporary		Interns		Apprentices (minors)	
	Male	Female	Male	Female	Male	Female
2015	33	44	162	164	102	153
	77		326		255	
2014	149	252	171	165	117	138
	401		336		255	
2013	204	271	257	248	123	132
	475		505		255	

Due to the nature of the Company's current business and operations, 99.5% of the people in its workforce live in the State of Minas Gerais. Only 37 employees work outside the State. Their birthplaces, too, reflect the profile of the company's operations: 93.86% were born in the State.

Employees by race, gender



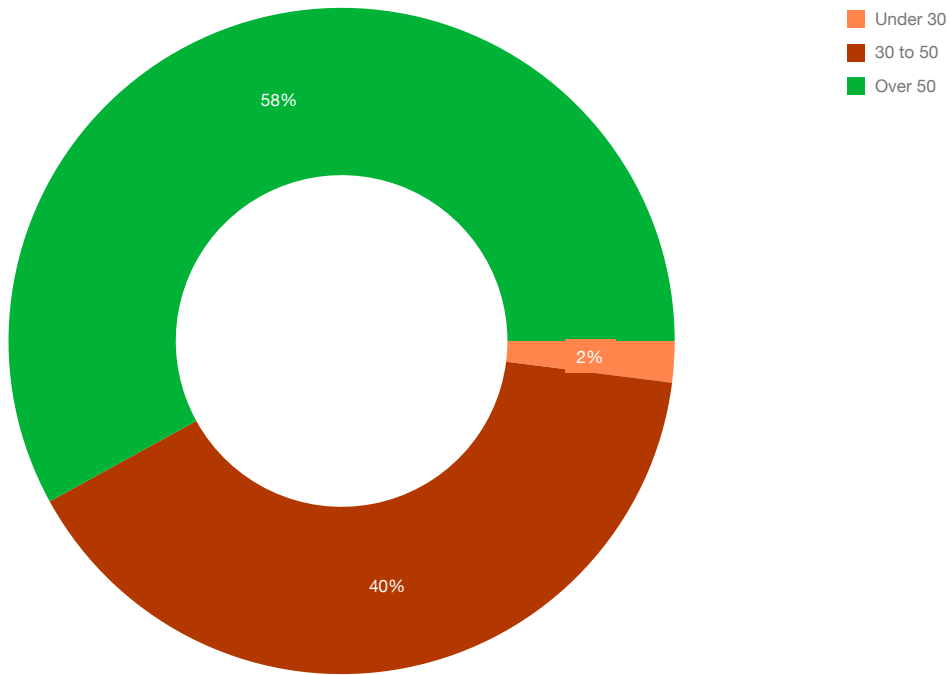
Employees by level



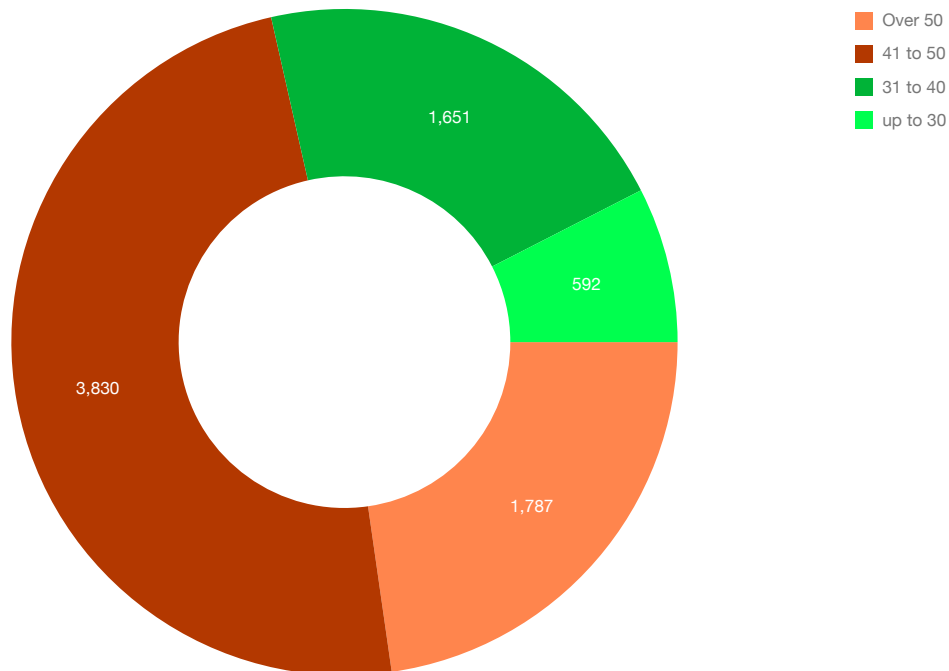
Technical-level professionals, who execute the Company's operations, are 79% of the total number of employees.

Employees of black, mixed-race, yellow or indigenous origin are 33% of the Company's own employees. Of these, 11% are women.

Ages (in years) of Directors and Board Members



Employees by age



Diversity of generations can be seen in the stratification of the workforce. Seniority and experience is provided by the 23% of Cemig's professionals who are over the age of 50.

In senior management, 58% are over the age of 50.

Outsourced employees are managed under specific contracts made by the business areas that contract them, including in relation to questions of health and safety, a subject that is present at the various stages of contracting. There are more detail in the item Suppliers.

With the new conditions required by the sector's regulations, Cemig is working for further efficiency and alignment with sector benchmarks. In 2015 the Company launched the *Programa de Desligamento Voluntário Programado – PDVP* (Voluntary Termination Program Scheduled), continuing the policy for retirement by those who have the full retirement qualifications.

With no public competitions in the year, and only 93 people leaving, the Company's turnover in 2015 was 0.78%. Turnover among men was 0.70%, and among women 1.39%.

COMPENSATION, BENEFITS AND PREPARATION FOR RETIREMENT

LA2

EC3

LA10

EC5

EU15

Cemig's remuneration and benefits for its employees are advanced, competitive, and in harmony with best market practice. The remuneration strategy, continuously improving the Company's attractiveness in the employment market, reflects a market-compatible positioning with competitive benefits and programs for employee welfare. Guided by its Jobs and Compensation Plan, remunerations are decided taking into account evaluations of job responsibilities, made in accordance with a specific methodology. This plan is oriented to attract, develop, retain and attribute value to the Company's best professional talents, who are necessary for the conduct of its business. It aims to do this while preserving the corporate culture and alignment with its objectives, competitiveness and longevity in the market in which it operates, without losing sight of the particularities of its segment of operation, and the concept that it is people, through the result of their work, who are responsible for maintaining and developing the organization. Further, the Jobs and Compensation Plan also establishes criteria for horizontal and vertical prospects, based on the employee's performance.

With the change in Cemig's Executive Board in January 2015 and the reformulation of the Company's Strategic Planning, completion of the review of the Jobs and Compensation Plan is scheduled for 2017. The objective is to adapt it to the new reality of the corporation's businesses, the Company's strategic planning, and alignment with the other HR processes.

The benefits offered by the Company will continue to favor quality of life and social well-being of employees and their families, contributing to a continuous improvement of the organizational climate.

This table shows ratios between the base salary and lowest salary paid by Cemig and the current minimum wage:

COMPANY	CEMIG H	CEMIG GT	CEMIG D
(Lowest base salary) / (minimum salary in effect) on Dec. 31, 2015	3.38	2.02	2.02
(Lowest compensation) / (minimum salary in effect) on Dec. 31, 2015	3.38	2.62	2.37

Cemig pays its own employees a variable remuneration, known as Profit-sharing or *PLR*, which it agrees annually with employees and their union representatives. The amount distributed is based on whether specific targets are met by each area, and also common corporate targets, aligned with the Company's strategic objectives. The amounts paid as profit-sharing are calculated on the basis of multiples of the salaries of each work category, in accordance with their level of duty and responsibility.

As well as its remuneration programs Cemig offers a series of benefits administered by itself and by the pension fund, *Forluz*, and the health insurance plan, *Cemig Saúde*, as follows:

– *Benefits to employees directly administered by Cemig:*

- advance against salary in the middle of the month;
- advance against the end-of-year '13th salary' bonus, in any month of the year, at the employee's request;
- advance against salary on return from vacation – with repayment by installments;
- reimbursement of expenses incurred by employees and/or their dependents as a result of being disabled;
- education assistance;
- funeral assistance;
- special paternity leave where the mother has an incapacitating illness;
- complement to salary for employees that are on leave under the national social security system (*INSS*);

- five days' leave upon civil marriage, rather than the legal requirement of three;
- five days' leave for accompaniment of an ill relation;
- meal and food tickets maintained if the employee is away from work for six months and, in the event of a work accident, 30 months;
- day-care assistance for four categories of employee – female employees from the end of their *INSS* maternity leave until the child is 7 (seven) years old; widowers who have the guardianship of children; married employees with a disabled wife; and single, divorced or legally separated employees who have guardianship of their children; and
- group life insurance.

– *Contracted temporary employees:*

- Cemig gives meal/food vouchers, on the same criteria as its own employees, and also snack vouchers to under-age apprentices.

– *Benefits administered by Cemig's Pension Fund (Forluz):*

- A full private pension plan.

– *Benefits administered by Cemig Saúde:*

- Cover for expenses on medical consultations, examinations and tests, outpatient attendance, hospitalization, surgery, obstetric care and dental treatment for employees and dependents.
- Cemig also maintains health programs administered by Cemig Saúde such as the *Novos Ares* program for giving up smoking, and the *Peso em Equilíbrio* program against obesity.

Cemig also offers a *Programa de Preparação para Aposentadoria – PPA* (Retirement Preparation Program), available to any employee wishing to attend, who may inscribe one adult family member or close relation. This gives an opportunity to discuss the moment of retirement and its repercussions in the personal and family environment; medical and psychological approaches to this phase of life; and participation in talks on entrepreneurship, voluntary work and other activities. This program had 146 participants in 2015. There is also a permanent program available – the Forluz Pension Plan and Financial Education Program - *Para Viver Melhor*, which deals with questions such as management of budget, investments, overcoming of debt and how to live better within one's financial capacity.

The diagram below shows the data on employees who currently have the right to retirement.

EMPLOYEES QUALIFIED FOR RETIREMENT (%)					
FROM 2016 TO 2020			FROM 2021 TO 2025		
LEADERSHIP POSITIONS	UNIVERSITY LEVEL	TECHNICAL- OPERATIONAL	LEADERSHIP POSITIONS	UNIVERSITY LEVEL	TECHNICAL- OPERATIONAL
1.35	3.97	17.67	0.97	3.45	21.35

DIVERSITY AND EQUALITY OF OPPORTUNITY

LA12

One of Cemig's principal values is a commitment to Ethics. This is a value of such importance to Cemig that in its *Statement of Ethical Principles and Code of Professional Conduct*, under Principle No. 4 ('Professional Integrity'), the Company undertakes to foster diversity and non-discrimination on grounds of race, gender, appearance, age, religion, political ideology or time of employment with the Company.

LA13

HR3

Cemig is also a signatory of the United Nations Global Compact, which encourages practices that eliminate any kind of employment discrimination. It has issued a Corporate Social Responsibility booklet disseminating practices specified in the Compact and in Social Accountability Standard 8000 – SA 8000, which encourages creation of good and dignified working

conditions.

Concerned to meet employees' needs, Cemig offers guidance and support through its Employees with Disabilities Program.

This benefit reimburses 50% of certain expenses of employees who are physically handicapped, or of physically and/or mentally handicapped dependents. These expenses may be for tuition at special schools, a variety of therapy options (art therapy, music therapy, play therapy, hydrotherapy, equine therapy, swimming, physiotherapy, speech/hearing therapy), prostheses, disposable diapers, or other needs, subject to prior analysis by the Company's Medical Department.

Situations thought to involve discrimination can be reported through the Company's anonymous complaint hotline. In 2015, the Ethics Commission received no complaints concerning discrimination.

With a traditionally male working environment, Cemig has sought to hire and encourage women to join its staff in both technical and management positions. It offers equal opportunity and differentiated benefits, such as pre-natal, post-partum and newborn care in the first three months of life, and daycare assistance.

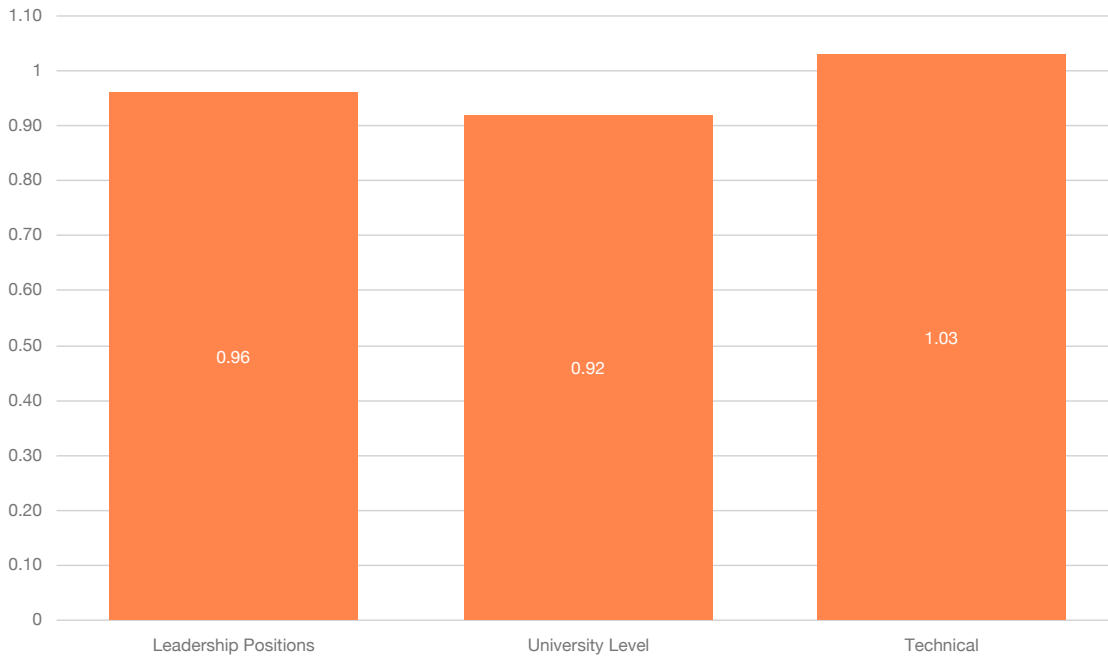
The Cemig Women's Committee was created in 2015, comprising one woman representing each of the Company's Departments. The aim of this group is to provide spaces for consideration and reflection on human relations in the work environment and to open scope for the presence and voice of women, aiming to develop increasingly respectful, healthy, democratic and fair interpersonal relationships, also aligned with the growth and attribution of value to individuals in the Company.

One of the Committee's key points is to listen to male and female employees with a view to proposing ways of improving the Company's culture and climate. For this purpose the Committee plans visits to all the areas of Cemig in the State of Minas Gerais, listening for opportunities to improve human relations, including in the regional units of Cemig's Distribution and Generation companies (Cemig D and Cemig G).

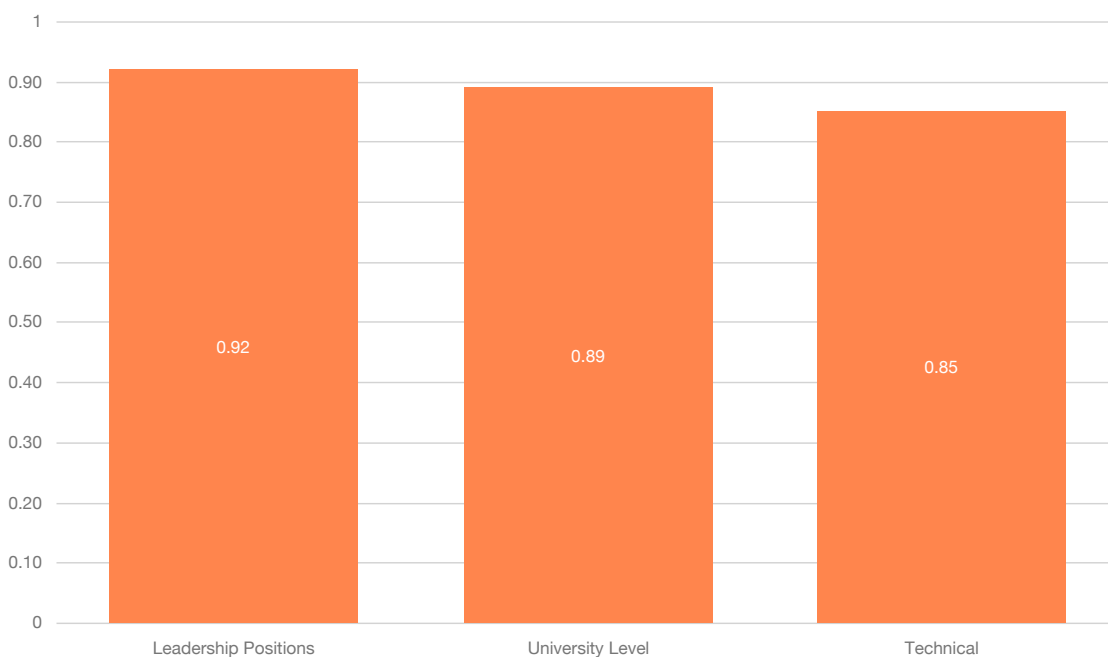
Women hold 13.7% of all jobs in the Company; of the technical jobs, 9.5% are held by women. They have 3.7% of the university-level jobs, and 0.4% of the leadership positions. Of the total of women employees, 26.4% are black or of mixed race. At Cemig, men and women have equal prospects for promotion, and the fact that women assume a higher degree of family responsibility than men, which sometimes has an impact on individual availability, does not constitute a disadvantage.

The ratio between women's and men's average salaries is close to one, which is a demonstration that competencies and strengths in the workforce tend to be valued in a way that is evenly-based independent of gender or location. This calculation is based on all the employees of all the Company's operational units located in the State of Minas Gerais, plus the 37 employees that work in other states.

Proportion of average base salaries women / men



Average remuneration of women / men



An important component that is added to the base salary, resulting in the final remuneration, is the additional amount for hazardous work, which is a legal right for people working in risk areas. The higher number of men than women who operate in risk areas results in a difference of the average final remuneration between the genders.

ORGANIZATIONAL LEARNING

EU14
EU18

Cemig's corporate university – UniverCemig – has the mission to continuously develop Cemig's body of staff, aligning its educational action with Cemig's strategy, maximizing the performance of the Company's human capital and corporate results, while achieving a balance between personal and professional life. Its campus is in the city of *Sete Lagoas*, where the face-to-face courses of the university are held. This campus has certification under three international standards: ISO 9001, which certifies processes from the point of view of quality; ISO 14001, which provides certification from the point of view of

environment; and OHSAS 18001, which gives certification from the work health and safety perspective.

UniverCemig has a management system that allows its learning solutions to be flexible in accordance with the Company's and the employee's needs. In its learning and content management system the employee, after a conversation with his/her manager, indicates his/her request for development, and for the courses to be adapted to his/her activities. UniverCemig defines its strategy for teaching of the employee as being tailored to this request.

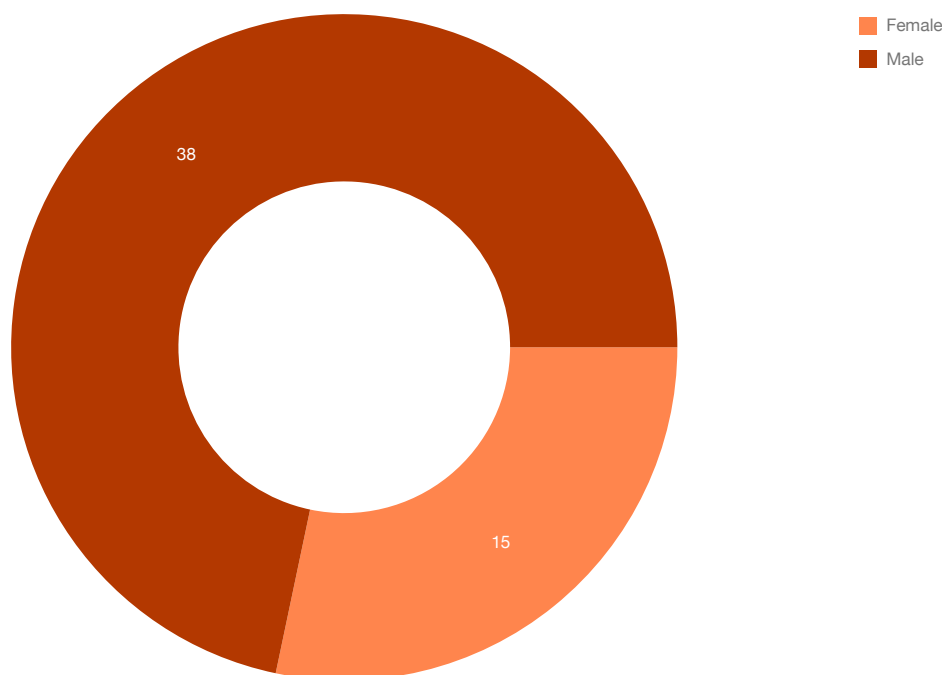
For the year 2015, with a lower total volume of finance available, reflecting the macroeconomic situation and the crisis in the Brazilian electricity sector, a strategy was adopted of meeting the demands that are a priority for the Company's business, such as courses on safety, which have a direct impact on operational efficiency, and those that fulfill legal requirements.

UniverCemig has increased its activities in distance learning, by which the employee can take part in courses without leaving his/her workstation, which also optimizes use of the Company's resources.

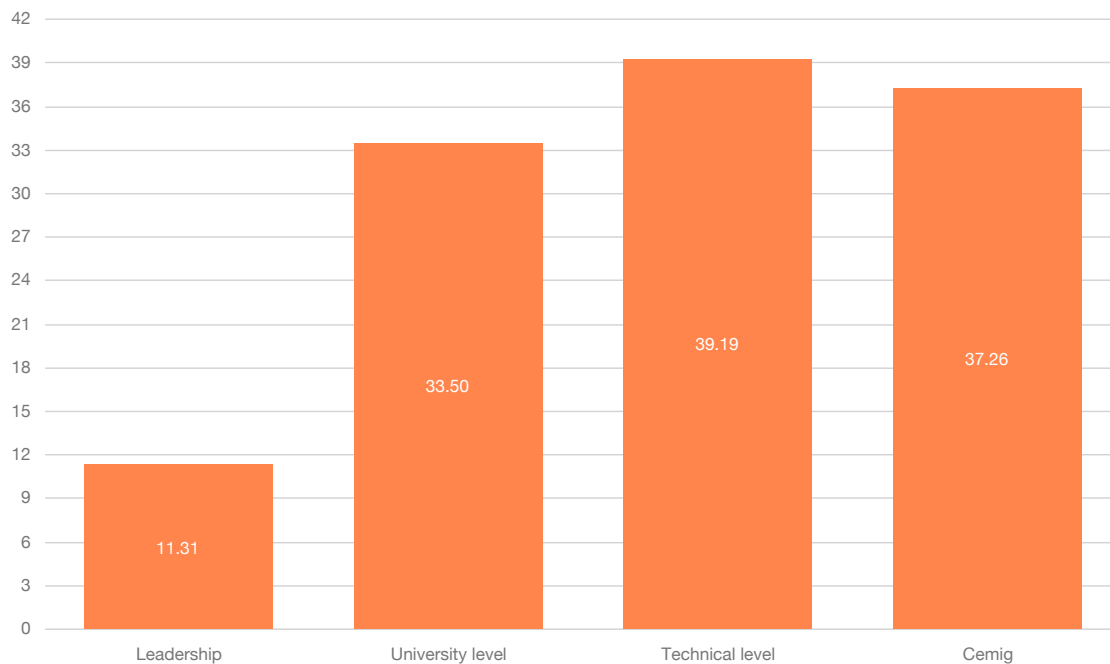
Face-to-face training at UniverCemig in 2015:

2015	NUMBER OF PARTICIPATIONS	MEN-HOUR TRAINED
Cemig	12,152	299,367
Other companies	2,234	111,100
Total	14,386	410,467

Hours of training by gender



Average hours' training, by employee level



In 2015 UniverCemig offered 12,152 participations and 299,367 person-hours of training to Cemig staff members. The total invested in training and development action was R\$ 35.8 million, or an average of R\$ 4,554.00 for each employee. This amount includes training experienced by employees outside UniverCemig. For online courses, approximately R\$ 80,000 was invested for a total of approximately 39,000 inscriptions. As well as the number of training hours, it is important to evaluate their effectiveness, and for this purpose Cemig has its Training Efficiency Index. In 2015 this was 99.8%, higher than the 95% target established for the year. For 2016 the target index is once again 95%, and due to the financial stress in the sector the target for number of hours' training per employee is 9 hours.

The following were the highlight courses in 2015:

- Course in defensive, effective and responsible driving: Continuing the good results from this course in driving of cars, trucks and light trucks, there were 1,439 participations in 2015, with a total of 33,128 person-hours of training. Of these, 15% were employees of companies that are Cemig's suppliers.
- Courses related to the regulatory rules NR10, NR33, and NR35: These had 4,116 participations and 79,472 person-hours' training (8% supplier companies). These are rules laid down by the Employment Ministry governing health and safety for the worker, dealing with electricity installations and services, work in confined spaces and work at heights.
- Course in electricity substation operations practice: In this course for operational efficiency, 711 electricians were trained with 4,929 person-hours of training. It prepares electricians for carrying out inspections and maneuvers under the coordination of the Distribution Operations Center in substations that do not have operators, offering safety to the employee, third parties and the system's equipment.

In distance training, four courses were launched in 2015, and one that had been started in 2014 was continued: these provide savings on travel and accommodation in comparison to face-to-face courses. These trainings were made available to all of Cemig's employees, and had approximately 39,000 inscriptions. These are Cemig's online courses:

- Residential Clients Satisfaction Survey (new)
- UniverCemig Online – Employee profile (new)
- How to be up-to-date with information security – 2015 edition (new)
- The Reserve System (new)

HR7

Members of Cemig's property and industrial security staff, which has outsourced workers, received the training and recycling course in 2015, which contains human rights aspects. One of the objectives of the course is to widen knowledge about the political vision and practice of affirmation of human rights, observing the complexity and diversity of human beings and their rights, including the point of view of respect for diversity of sexual orientation, rights of women (combating gender violence), children, adolescents and the elderly, those with special needs, in other words, combating in general the use of discriminatory practices in exercise of the profession. In 2015, 100% of the 198 security guards were trained in subjects related to occupational health and safety and human rights – representing 63.35% of the total of Cemig's employees in the area of security.

PERFORMANCE MANAGEMENT

LA11

The aim of Cemig's performance management is to achieve the organizational targets and promote the development of the competencies necessary for activities to be executed. Implementation of an effective Performance Management process has helped improve Cemig's performance, through alignment between the employee's activities and the initiatives set out by the Company's Strategic Planning. It has also helped to promote collaborative dialogue and planning of employees' careers.

A fundamental element for this process to be effective is to establish its methodology in a way that is coherent with the organizational strategy. To increase alignment and adherence to the organizational strategy, a revision of the Performance Management Process, begun in 2014, now takes into account the guidelines of the new Executive Board appointed in 2015. In this period of review, including the construction of a support tool for the process, the 2013-4 and the 2014-5 cycles were not carried out. Preparation of Cemig's new Jobs and Remuneration Plan, also in progress, will provide direct support to the Performance Management process, through updated information on responsibilities, requirements and competencies necessary for each function, and the new shape of the Careers Plan.

LABOR AND UNION PRACTICES

G4-11

Through its public adherence to the Global Compact, and also internally through its Human Resources Policy, Cemig recognizes labor unions as legitimate representatives of employees, and respects employees' union affiliation choices. The Company has set up a specific department to deal with labor union relations, and maintains constant contact with these entities, seeking always to use all means that are acceptable from a business point of view to achieve negotiated solutions in an ethical and respectful fashion.

HR4

LA4

Also from the point of view of labor union relationships:

LA8

GC3

- Cemig allows its employees total freedom to take part in labor unions, and even allows union contributions to be paid directly out of payroll.
- 177 active employees are members of executives of unions representing employees;
- 114 employees have provisional job security due to their labor union activities; and
- there are rules for holding sector meetings between labor union representatives and employees on Cemig's premises, and rules for Union Leaders to have access to the premises, in obedience to ILO Convention 135.

Every year, Cemig takes part in collective negotiations with the representatives of the employees to establish the collective work agreements. These aim to contribute to an optimal organizational climate, by and through achieving strategic objectives in negotiation of the collective work agreements and specific work agreements for participation in profit sharing (*PLR*) – using the guidelines set by the Board of Directors as a reference.

This work is carried out in an integrated form with the other management units, in discussion groups on the subjects of: health and safety, the jobs and remuneration plan, employment relations, productivity and priorities, economic conditions, profit sharing (PLR), *Cemig Saúde* and Union Negotiation of the Collective Agreement. There were 40 meetings in 2015, as part of a permanent on-going process of negotiation.

After agreements have been reached, management of the Agreement Terms takes place through monitoring of compliance with the obligations agreed with the unions and employees, using indicators and plans of action.

Compliance with the collective obligations often requires development of specific HR policies, establishment of procedural instructions, and commitment by other management units to execution of all the clauses.

Cemig considers that the exercise of the right to strike is legitimate. However, since it provides services that are considered essential to the population, under Law 7783 of 1999 a formal notice from the labor union entities, or by the workers, is required to be given with 72 hours' advance notice. In spite of the adverse macroeconomic situation and specific problems of the electricity sector, Cemig presented a proposal with increases in workers' compensation, above and beyond the profit-sharing amounts, culminating in one of the best proposals given anywhere in Brazil's electricity sector. The distance separating the labor union entities' expectation and the factors of the current economic situation made the negotiation difficult, and this resulted in a strike that lasted 52 days – 37 in 2015 (6 days in November and 31 days in December) and 15 days in January 2016 – in which on average 16.15% of the employees on Cemig's staff took part. There were no resulting effects on the services provided to the population.

For 2016, the scope of activities of the area responsible will be widened: it will now have responsibility for management of employment relations, prevention of employment-law liabilities, supervision of contractors as to their obligations under contracts, employment law and health and safety requirements – enlarging the scope of employment-law relationships, adding labor union relations as a whole.

OCCUPATIONAL SAFETY, HEALTH AND WELL-BEING (OSHW)

DMA
EU16 Since 2007 Cemig's occupational Health and Safety policy – aligned with Principle No.1 of its statement of Ethical Principles and Code of Professional Conduct – presents one of the objectives of the Company's strategic corporate map, which is to establish Safety as a value in the corporate culture. This strategic objective is monitored by the Company's "*Taxa de Frequencia de Acidentes*" – TFA Accident Frequency Rate. The policy, which is intensely publicized, establishes the high importance of the subject for the Company's business and for adequate protection of the whole of its workforce, whether its own employees, contracted individuals or outsourced companies. Performance in health and safety directly affects the organizational climate, and can also have an effect on the brand and its reputation, and/or cause the Company to be faced with employment-law or other legal contingencies.

The following are principles of policy of the Company: identification, evaluation and control of risks to occupational health, hygiene and safety; pro-activeness in actions for prevention; compliance with legislation and internal rules; the worker's right to refuse to expose himself to unsafe situations; and his/her accountability – whatever his/her hierarchical level – for any omission in the commitment to promote Occupational Health and Safety.


As a development of this policy, as from 2009, the Company has had a technical Occupational Health and Safety manual on its intranet, containing various internal instructions, compliance with which is compulsory. The Company holds periodic audits and establishes criteria and procedures for accountability and penalties for non-compliance with the policy, rules, instructions, procedures or orientations. Cemig has further information and campaigns on its site, to incentivize practices that aim to continually reduce the number of accidents and illnesses, not only in the Company but also in the electricity sector as a whole.

As an improvement of this strategy of health and safety management, the Health and Safety pact was agreed at the end of 2013, and resulted in the formation of a work group at the beginning of 2014, of six representatives of the Company and eleven representations of labor unions, to promote joint action to consolidate Safety as a value in the Company, and optimize the organizational climate.

Even after the conclusion of the work at the end of 2014 the subject continued to be discussed, and in 2015 the Work Health and Safety Theme Group was set up on a permanent basis: during the year it held seven meetings between the labor unions, representatives of the Company and employees.

Also, aiming to achieve a tighter and more proactive control of management of risks in work situations, a new management model, called *Hira-Cemig*, was put in place and began operating in 2015. Supported by international rules and models, it creates scenarios through numerical risk profiles, enabling management of internal and external changes, checking for compliance with current legislation, planning and implementation of new control measures, their validation with employees and their line managers, and identification of ergonomic demands, when the need for a detailed analysis of production procedures is detected.

As well as these practices, Cemig has other tools that help the process of management and monitoring of Work Health, Hygiene and Safety. Examples are:

- **Risk analysis**, carried out prior to each operational activity. The specific aspects of each situation are taken into account, including workers' physical and mental condition in the period before they start the activity.
- **Sistema de Monitoramento e Auditoria para Análise da Segurança Praticada - SIMASP (Monitoring and Auditing System for Analysis of Safety Practices)**, which standardizes and streamlines work safety inspections and provides data for the "*Indicador de Segurança Praticada*" – ISP (Safety Practice Indicator) – a measure of compliance with occupational safety and health requirements  **Data on sub-contractors is managed by the contracting departments.** and procedures in the work of the Company's own staff and sub-contractors.
- **Sistema de Monitoramento de Acidentes e Riscos do Trabalho – SMART (Work Risk and Accident Monitoring System)**, which is run each month for accident management, generating statistical reports based on the registration of accidents, broken down by type.
- **Programa de Prevenção de Riscos Ambientais – PPRA (Environmental Risk Prevention Program)**, required by law: This is executed annually at each Company facility, and consists of anticipating, recognizing, evaluating and controlling physical, chemical and biological risks, serving as one of the sources for drawing up *Hira-Cemig* risk profiles.
- **The Interlude for Safety**: A forum held monthly for presenting and discussing issues relating to Occupational safety, health and well-being, and sometimes used for alignment with policy and dissemination of information.

Other tools for monitoring employee health and well-being include periodic and special medical inventories, psychological evaluations and social inventories, conducted locally where employees are on duty.

The permanent program for promotion of health that the Company maintains is called *Energia Vital*. It aims to raise employees' awareness as to the importance of personal quality of life and quality of life at work. There are more details of this and other programs on the [website](#).

LA5 In light of technological developments in the electricity sector, with a consequent need for review of working methods, the Company maintains internal committees that address technical matters directly or indirectly related to Occupational safety, health and well-being issues, in addition to actively participating in a variety of working groups at the national level, as well as on *Associação Brasileira de Normas Técnicas - ABNT* (Brazilian Technical Standards Association) commissions and study groups.

Another highlight in 2015 was the creation of the Integrated Work Accidents Risk Prevention Group, which aims to set and

ensure construction of a Work Health and Safety Strategy enabling the necessary action to be taken to achieve the target of zero tolerance for serious and/or fatal accidents. This action can be summed up as:

- alignment of all Cemig's efforts in relation to Work Health and Safety;
- ensuring the technologies and knowledge that are necessary in the area of human resources, material and equipment; and
- ensuring that properly processed and reliable information is available for all the stakeholder publics.

Cemig operates 73 *Comissões Internas de Prevenção de Acidentes – Cipas* (Internal Accident Prevention Committees), which cover 100% of all employees and are made up of their representatives, employers and labor union groups. They operate autonomously and independently to work on prevention of accidents and occupational diseases. Before each year of office, all members of all committees receive training – the content of which is defined by law – through *UniverCemig*.

In the ambit of Work Health and Safety, regulations are laid down for the internal Accident Prevent Committees. These include: requirement that labor unions should participate; a medical health inventory; monitoring of contractors for work safety; and notification of serious or fatal accidents, including disclosure to all employees and other stakeholders.

Results of Indicators

LA6

As a result of the various actions and programs of the Company aimed at Health, Hygiene and Work Safety issues, the accident indicators have shown a continuous reduction trend over the past decade. Considering their own staff and contractors, the *Taxa de Frequência de Acidentes – TFA* (Accident Frequency Rate) on the work force closed with a value of 2.56, about 120% lower than in 2005, when the rate was 5.88, according to the data shown below. In the same period, the indicator for contractors was 2.74, and for their own staff 2.04.

Cemig has a computerized system, in which are computed all accidents reported in the Company with their own staff or contractors, in addition to accidents involving the population in the Company's concession area. The Frequency and Severity Rates of accidents are monitored using the standard referenced in the ABNT Brazilian Standard NBR 14.280.

TYPE OF ACCIDENT	EMPLOYEE CATEGORY	2012	2013	2014	2015
Work accidents not causing time off work	Employees	47	38	36	39
	Outsourced	194	159	119	175
	Total	241	197	155	214
Work accidents causing time off work	Employees	16	23	24	28
	Outsourced	169	90	75	106
	Total	185	113	99	134
Occupational disease	Employees	1	-	-	3
	Outsourced	N.A.	N.A.	N.A.	N.A.
	Total	N.A.	N.A.	N.A.	N.A.
Days lost	Employees	639	411	886	398
	Outsourced	1,627	2,427	1,937	2,387
	Total	2,266	2,838	2,823	2,789
Absentee rate	Employees	1.50	1.26	1.05	1.23
	Outsourced	N.A.	N.A.	N.A.	N.A.
	Total	N.A.	N.A.	N.A.	N.A.
Work-related deaths	Employees	-	1	-	-
	Outsourced	2	3	2	5
	Total	2	4	2	5

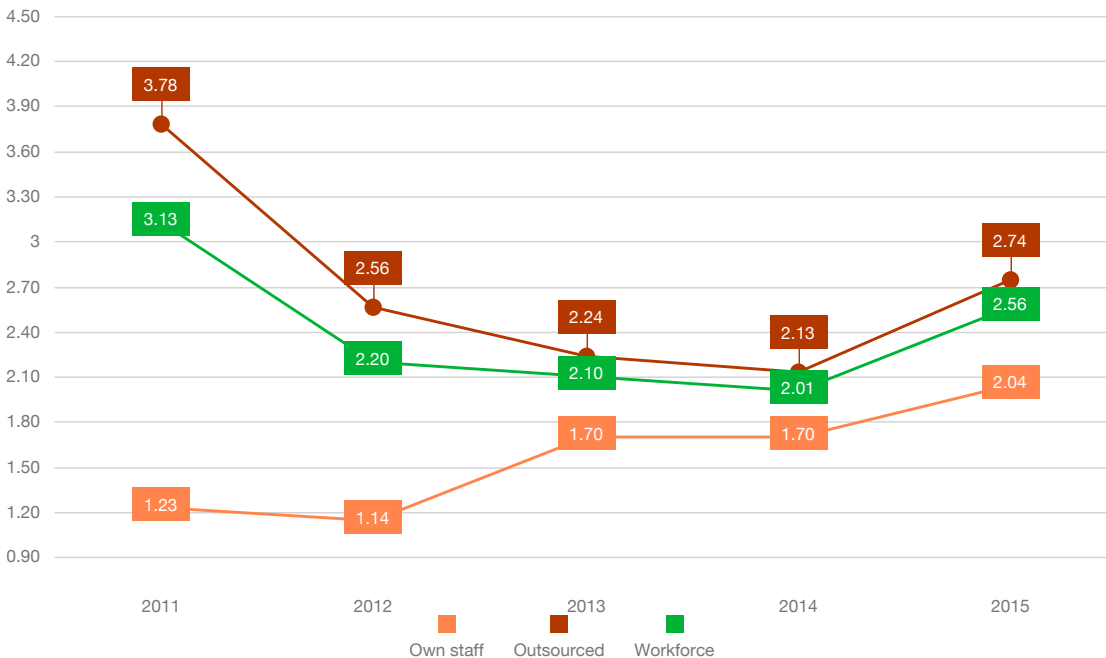
Calculation of the absentee rate includes all reasons for medical leave from work, and excludes maternity leave. This indicator

is analyzed monthly, to generate proposals for reduction through programs for prevention of the employees' health, in a partnership with *Cemig Saúde*.

The five deaths in 2015, were among workers of outsourced companies. Three were caused by traffic accidents; one by electric shock; and one where a tree fell on the worker. For all serious and fatal accidents Cemig establishes a system of investigation and a consequent plan of action to avoid recurrence. Since 2008 the standards, and flow, for investigation and analysis of serious and fatal accidents have been established through internal Work Instructions – the documents are: IST-SESMT-4.5.3-001-001 and IST-SESMT-4.5.3-001-002 – *Analysis and Registration of Light and Potential Accidents*. At the end of the investigation process, information about all actions identified as being able to eliminate probable causes is widely disseminated to the workforce. As described in the item above, there are various campaigning and training actions in progress by the Company and its contractors focused on prevention of traffic and operational accidents, and reversal of negative results.

This diagram shows the TFA accident rate in terms of Brazilian ABNT standard NBR 14280:

Rate of accidents with lost time (TFA)



SUPPLIERS AND CONTRACTORS

SUPPLIERS

HR4
HR5
HR6

Management of Suppliers

Three main documents – Cemig’s Supply Policy; its Statement of Ethical Principles and Code of Professional Conduct; and its Anti-fraud Policy – orient Cemig’s relations with the supply chain. They are backed and expressed by the Supplier Relations Manual, which is permanently available on Cemig’s Suppliers’ website – which was inaugurated in 2009 during the First Cemig Suppliers’ Meeting. (<http://compras.cemig.com.br/ExibeAvisoPortal.aspx?Codigo=63>).

Based on these policies, principles and guidelines, five priority commitments have been defined as a strategy for managing the supply chain: (1) commitment to the public good, and respect for the principles of legality; (2) commitment to business ethics; (3) commitment to equality of treatment; (4) commitment to transparency; and (5) commitment to social and environmental responsibility. These pledges are in keeping with the Principles of the UN's Global Compact, of which Cemig is a signatory.

Because its controlling stockholder is in the public sector, and is thus subject to the Law on Public Competitions (Law 8666/1993), Cemig does not engage in direct contracting of suppliers, nor does it preferentially hire local suppliers. However, a large number of local suppliers are registered on the website, and 63,547 of the 79,519 suppliers listed there in 2015 were from the Company's home state of *Minas Gerais*, or 79.9% of the total. The proportion of outlays with local suppliers in 2015 was 66.27% for materials acquisitions, and 79.94% for services, so that, overall, 75.95% of expenditure goes to *Minas Gerais* suppliers.

The supplier relationship begins with a rigorous registration process, in which 100% of the candidates must satisfy legal, technical, financial, social, environmental and health and safety criteria to participate in tenders. Not filling these requests determines elimination from the registration process. The Company does not record how many companies are not accepted.

Bids must be in compliance with the terms of calls for bids, and the required documents must be submitted upon the signing of the contract, which includes environmental, social and governance clauses. Candidates must pass the *Avaliação Técnica Industrial - ATI* (Technical Industrial Evaluation) – for suppliers of materials, or the *Avaliação Técnica de Empreiteiras - ATE* (Technical Contractor Evaluation) - for the service suppliers, and be compliant with the social-environmental responsibility practices specified in the SA 8000, ISO 14001, OHSAS 18001 standards and the Global Compact. In 2015, 77 ATI visits to register suppliers and 42 ATE visits to register contractors were conducted, all of them including environmental requirements.

Selection of suppliers is by competitive bid, since Cemig is subject to Law 8666, and therefore a bidder may be excluded if not compliant with legal requirements – such as the law against child labor, or other degrading or compulsory labor, and the clauses protecting human rights. Cemig encourages certain other supplementary items, such as implementation of ISO standards for social and/or environmental responsibility, so that its value chain will disseminate good practices.

As described in the chapter on Ethical Conduct, as from January 2015 all contracts signed between suppliers and Cemig require the supplier to undertake: “to be aware of and comply with the rules specified in Law 12,846 of January 8, 2013 (the ‘Anticorruption Law’); to refrain from committing any acts that may tend to harm the public administration, and to denounce any irregularity of which it becomes aware, through the channels made available by Cemig.”

The areas responsible for contracting check all these requirements during execution of contracts, to see whether the conditions laid down in the call for bids and the contract are being maintained, in all the supply chains. Also, payment for services rendered is contingent on submission of documents proving payment of the employment-law-related charges on payroll, and of the employees’ salaries themselves – so that contractual penalties can be applied if a supplier is not meeting its social obligations.

Cemig’s principal action in relation to its supply chain is preventive (during the registration phase); but there are mechanisms for mitigation (fines, and cancellation of contract) and remediation (for example follow-up on termination of employees of sub-contracted companies).

A further procedure has recently been formalized: an assessment of risks to sustainability in the supply chain, in all purchasing processes in progress at Cemig and its subsidiaries. This assessment examines any economic, environmental and social responsibility risks to which the company is exposed due to the actions of its suppliers. These risks could cause damage to Cemig’s brand, image or reputation in the eyes of the numerous stakeholders; or cause losses relating to the market and the Company’s competitiveness, with the possibility even of criminal or civil liability being urged against the Company. The

Company also seeks to use management of the supply chain as an opportunity to improve its financial performance over the long term.

Accordingly, the Company has identified which of its suppliers have high sustainability risk, considering the potential negative impacts that could result from serious non-compliances on their part. The identification of materials, services and suppliers that pose a high risk to sustainability is reviewed annually, prompting follow-up and supervision of suppliers from the registration stage through to technical evaluation, and supervision also of contract execution. In 2015, analysis of the 644 suppliers with contracts in force concluded that 40 should be defined as of high sustainability risk, and these are receiving special attention from the areas that contracted them.

LA15 EN33 HRT1
For already approved suppliers, there are extensive requirements and diligence involved in mapping potential risks, and the probability of their realization, and their tangible and intangible impacts in terms of financial value or of strategic importance to the Company. This analysis is conducted to measure risks and losses that could result from failures within the supply chain, to comply with environmental, social and governance legislation and requirements.

Among factors considered as having the potential to generate negative impacts are: environmental operating licenses, products and services, waste management, water use permits, fundamental human rights considerations, child labor and compulsory labor, freedom of association, working conditions, occupational health and safety conditions, business ethics, corruption and anti-trust practices.

To prevent and mitigate risk, the Company adopts risk management measures that, primarily, include transparency in all bidding processes. (<http://compras.cemig.com.br/>) In addition, Cemig encourages improvement in the management of its service providers through a contractual clause requiring amortization of any penalty payments by as much as 50%, if compliance is proven with requirements such as: ISO 9001, ISO 14001 and OHSAS 18001 certifications; proof of training of technical staff; and having service managers enrolled in or graduated from corporate management courses.

For suppliers with low performance grades or showing negative or potentially negative conduct in assessments, inspections or audits, penalties may be imposed in the form of penalty payments, warnings, meetings, cancellation of orders or contracts, or revocation of approvals; or internal proceedings for suspension of registration – depending on the seriousness and/or recurrence of the circumstances in question.

In 2015, Cemig initiated 33 administrative proceedings: 18 were for breach of contract (failure to meet deadlines, non-delivery of items, irregular service); three for serious accidents; five for irregularities in specific work projects; four to ascertain the legitimacy of bidding procedures; and three for suspicion of falsification of documents and fraud. To measure the performance of suppliers or contractors, Cemig uses the *Índice de Qualidade dos Serviços Contratados – IQSC* (Contracted Services Quality Index), in which its score was 67.43% in 2015 – this was lower than the target that had been set, due to (a) the effects of macroeconomic stress on contractors, and (b) work safety indices, as reported in Health and Safety. Since this indicator was lower this year, various measures are being taken to achieve the target of 80% in 2016. This indicator defines the quality indices with the social and environmental aspects. Details on this KPI are available online at:

<http://www.cemig.com.br/en-us/suppliers/Documents/LINK%205%20PDF%20ING%20rev%20final.pdf>

To ensure supplier supervision, Cemig maintains its practice of daily inspections of contractors: there were 9,679 safety inspections to analyze Safety Practices, which can be expressed as a total of 160,776 person-hours inspected. Service quality inspections, which are also routine procedures, to assess the quality of services and waste management, totaled 46,964 procedures – this number includes both emergency and commercial services.

Throughout 2015 Cemig maintained – and monitored contractors' compliance with – its requirement for obligatory declaration by new suppliers (and those renewing registration) that they do not employ minors under 18 on night, hazardous

or unhealthy work, nor employ minors under 16 at all (Law 8666/93).

Other forms of monitoring, evaluation and control of the supply chain include the internal audits, by audit teams that are independent of the supply chain and of contract management. These are audits for compliance with ISO 9001, ISO 14001 and OHSAS 18001 conducted by third parties, as supervision of the contracts made by managers.

MANAGEMENT HIGHLIGHTS AND PROGRESS IN 2015

The annual Cemig Suppliers' Awards – 2015

As a way of encouraging quality in the provision of goods and services, and of recognizing coordination between suppliers and the Company in reaching common objectives, a number of suppliers of materials and services were honored at the 5th annual *Cemig Suppliers Awards* event, held in December 2015.

In 2015, a total of 644 suppliers received purchase orders or contracts from Cemig. Of these, the awards singled out 65 suppliers for performance based on criteria such as quality, safety, guarantees and price. Of this total, 38 achieved the grade of excellence in 'Assured Provision of Services,' and were awarded plaques in recognition of this. Suppliers of materials who received the 'Assured Provision of Materials' accolade, as well as trophies, also received certificates exempting their deliveries from prior inspection of goods by Cemig for a period of one year.

Three suppliers were recognized for the significant contribution to society of their practices in social and environmental responsibility, and job safety. The recognition for job safety is a feature introduced to these awards in 2013.

Program for carbon management in the value chain

The 4th edition of the Program for Carbon Management in the Value Chain, developed by the Chamber for Energy and Climate Change of the Brazilian Business Council for Sustainable Development (CEBDS), Brazil's representative on the World Business Council for Sustainable Development (WBCSD), has been raising the awareness of 312 suppliers of member companies and has trained them to draw up their own greenhouse gas (GHG) emission inventories, since 2012.

Cemig was one of the Program's sponsors in 2015, together with another 3 CEBDS member companies. The percentage of suppliers taking part in the process of awareness and training increased to 65% from 35% in 2014. The training orientation was given to 62 suppliers, and 14 suppliers completed their emission inventories. Another nine are in the process of preparing them.

COMMUNICATION CHANNELS WITH SUPPLIERS

HR12

Cemig has created a Procurement Website for supplier engagement. It is an open, direct-interaction channel that gives access to all procedures for tender processes, and announces contracts made – enabling suppliers to interact and follow up on processes and results. It also enables suppliers to post proposals and bids, register authorizing documentation and take part in electronic auctions.

The site is accessible to the public and allows stakeholders in general to follow these processes, contributing to greater transparency and authenticity.

E-mails of complaints and suggestions are another standard communications channel in all management units engaged with

suppliers. Cemig has now restructured and standardized this system for e-mail communication – for improved visibility, and to encourage use by other stakeholders. The most frequent requests have been for explanations and information about tenders and contracts. The complete inventory of contact and interaction with suppliers comprises phone, e-mail, publications in the “Official Gazette” (*Diário Oficial*), PEC (Procurement Portal) exchanges during online auctions, fax, correspondence, meetings and visits to address specific questions.

EN34 All requests for information received through any of the channels are analyzed and forwarded for appropriate treatment. No complaints of an environmental nature were recorded in 2015.

RELATIONSHIP WITH THE COMMUNITY

Importance of relationship with the community

DMA Cemig bases its relations with communities near its project sites on a sense of joint responsibility, and stimulus for local economic and social development.

S01 It acts in accordance with its Community Communication Policy, which specifies guidelines that orient its communications strategy. The aim of this policy is to develop the right instruments for communication between the various segments of the communities and the Company’s principal areas of operation – primarily generation, transmission, distribution and development of electricity supply.

GC1 Relationships aim to ensure engagement with a broad spectrum of stakeholders. The criteria adopted to guide dissemination of Cemig’s initiatives in the communities where it operates aim to ensure that they are understood by governmental authorities, the electricity industry, investors, clients and consumers, the scientific community, suppliers and service providers, the internal public, society as a whole, the media – and above all the communities themselves.

GC2 Employees and outsourced contractors carrying out activities in the field both have direct interaction with the interested publics in order to achieve the closest possible relationship with communities. The Company’s Corporate Communications team is responsible for diagnostics of any demands received, and for planning and action to engage with communities.

Supported by an opinion survey and analysis of the information gathered, these actions of engagement function as a strategic instrument – aiming at all times to create ever-closer relationships with the community, and better management of the opportunities, the risks, and Cemig’s reputation.

Cemig uses a variety of tools in engaging stakeholders. One is the Social-environmental Diagnosis, which it carries out for new projects or operation of existing projects. In this process, a quantitative or qualitative survey is made with opinion formers, environmental bodies and the interested public in question to identify what perception the community and its representatives have of the image and role of Cemig in the region. Based on this, a communication plan and a methodology appropriate to local habits and customs is developed. After five years, a further survey is carried out to measure the knowledge that people have about the program, and Cemig’s image. Another important tool of engagement is face-to-face visits to communities around Cemig’s projects, to disseminate information about the program, the project and the Company. All information gathered in the field is systematically compiled in periodic reports.

In addition to the tools for engagement already noted, the Company also organizes institutional contacts, meetings, lectures and events, news clipping summaries, press releases, visits to facilities, creation and distribution of materials and informational items, and opinion surveys.

Communication agents in rural *Minas Gerais* are a bridge between the Company and the community. They make direct contact, and are present at the Company's projects wherever there is significant need for this attention. They are responsible for holding periodic meetings and for disseminating all kinds of communication to their stakeholder publics – the press and the community. All the requests they gather are passed on in reports, which are analyzed and which generate action plans.

The highlight program in 2015 was in the Irapé region. Cemig invested in face-to-face visits by a field professional, working *in loco* in the region of the *Irapé* hydroelectric plant, making it possible to produce a map of the community's concerns, and develop a strategic plan of action. The field communicator made visits to get closer to the populations affected, local authorities and municipal and regional leaders, members of civil society organizations, and the media – giving wide publicity to the project and the social-environmental programs linked to it.

In 2015 Cemig made approximately 250 visits, in more than 25 municipalities in the region of the Irapé plant, where the program is established on a permanent basis. This process has demanded of Cemig a very well-structured and articulated work of engagement, enabling the field communicator to strengthen the dialogue between the Company and the communities in its area of activity, operating as a mediator among the interests of all the parties involved.

Another highlight program in 2015 was the *Programa Proximidade* (Proximity Program), which brings the Company's community relations activities together into a single stream. This includes a series of meetings which give the public an explanation of the operational and safety procedures at Cemig's hydroelectric plants, instructive information about climate conditions, and even guided tours of its power stations – and collects input and demands from the public. It also establishes partnerships with local leaders, official agencies, local media and other agents responsible for safety and for preventing flood damage, such as Civil Defense, the Fire Department and the Military Police. In the last year this program has held five events reaching a public of 350 people.

Numerous actions have been taken to meet local conditions at projects such as *Rosal*, *Emborcação*, *São Simão* and *Jaguara*. Social-environmental programs were developed in the municipalities close to these projects, directed to the target public affected by the plants, to make information available about the project directly affected, through communication channels and tools. These lines of activity are identified and prioritized on the basis of the needs and expectations of the communities where Cemig operates, which are ascertained through the diagnosis carried out for the Communication Plan. The activities of engagement are being used as tools to attenuate misunderstandings between the Company and the communities in the areas of influence of its dams, making it possible to manage any conflicts between the parties involved and produce actions that are socially viable for both parties.

Cemig carries out a range of social-environmental activities arising from its projects. An example is the diagnosis in relation to the *Aimorés-MascarenhasLT2* Transmission Line. Face-to-face visits were made in the municipalities of *Aimorés*, *Baixo Guandu* and *Sacramento*. The aim of the diagnosis initiative was to get to know the people who live close to the Cemig transmission line – what perception they have in relation to the project and the Company; to understand that community, to exchange understanding about living in safety with a transmission line; and to inform them about the services Cemig provides in the region.

It is expected that, with joint actions of engagement, the relationship between the Company and the publics will get increasingly close, adding value to the Cemig brand, and firmly establishing its reputation as a Company that is responsible, and concerned to mitigate any impacts it may cause in the communities around its facilities.

To build substations, power plants and repeater stations, Cemig sometimes has to acquire the property of residents in communities where it is establishing a project, or rights of way to implement distribution and transmission lines, or distribution networks. To guide this process, there is *Aneel* Normative Resolution 560 of July 2, 2013, which gives orientation on areas declared to be of public utility for the purposes of expropriation and establishment of rights of way needed for installation of electricity generation, transmission and distribution facilities.

Feasibility studies carried out by specific internal teams identify people who will be affected by projects. These studies ascertain whether the options for routes will affect conservation areas, areas of Legal Reserves, or sites being or to be divided for new housing; whether recent improvements will need to be eliminated; whether owners accept the proposed project; and amounts of compensation to be paid. The best route is chosen after analysis of these studies.

No families were displaced in 2015, but 595 negotiations were conducted with owners for implementation of 111 Cemig projects, involving approximately R\$ 10.4 million. None of these negotiations prompted any lawsuits against Cemig (sparing the Company additional expense). Cemig respects the individual integrity of each citizen, and the history and culture of the communities affected by projects, and also values amicable negotiation – seeking to compensate property owners in affected areas with the fair market price, based on appraisals drawn up in accordance with *Associação Brasileira de Normas Técnicas* NBR 14.653 (Brazilian Technical Standard).

The Irapé Power Plant

The program for relocation of the population affected by the formation of the reservoir of the *Irapé* Hydroelectric Plant was received as a Development Program, with specific funding allocated to it, and priority choice in favor of the modality known as Collective Resettlement, so as to ensure that family and neighborhood ties are maintained, and to give more effect to the participation of each community in the implementation of the projects. This also made it possible to share the benefits offered by the collective infrastructure that was put in place, in accordance with the guidelines laid down by the *Termo de Ajustamento de Conduta - TAC* (Execution Agreement) entered into with the State Public Attorneys' Office, the Federal Public Attorneys, the State of *Minas Gerais*, the Cemig, The *Minas Gerais* State Environment Foundation and the *Palmares Cultural Foundation*. The *Boa Sorte Quilombo* Association, and the Committee of People Affected by the *Irapé* Dam.

As well as the landowners and occupiers that lived or worked in the directly affected area, others were also included as beneficiaries in the program: their married and unmarried adult children, and rural workers not owning or controlling the real estate properties affected, but who use the land for their sustenance, working as farmhands or assistants to, or in partnership with, its owners.

The program began building its Social Register of Families in February 2002. This culminated in the constitution of 28 resettlement groups, who occupied 83 areas of, approximately, 60,000ha of land, an area five times greater than the area in fact flooded by the reservoir. Further, all the municipalities that received resettlement projects, but which had infrastructure deficiencies, received strengthening support for their facilities of education, health, epidemiological vigilance and road systems, to a degree designed to bring these services to the level that would meet the new demand arising from the resettlements.

Once the 28 resettlement associations had been created, as a channel for participation by the communities in all the phases of discussion and implementation of the resettlement projects, 28 *Planos de Desenvolvimento Sustentável dos Reassentamentos – PDRs* (Sustainable Resettlement Development Plans) were prepared. As well as the data on

the physical infrastructure of each project, the PDRs also covered identification of the individual and community aspirations of the people who were to be resettled, including their individual and collective future productive plans and projects. Through the Social Well-being professionals, the associations receive, and continue to receive, training in the practices of associations and cooperatives, and their elected members (chair, secretary and treasurer) receive specific training for carrying out these respective functions.

A total of 693 families were resettled, in 422 lots, located on 83 farms. So far Cemig has delivered 501 titles of land ownership to the resettled people, and in 2015 made continuous efforts to deliver land titles to those affected by the construction of the Irapé plant, aiming to use all the input available – legal and tax information, environmental and social knowledge and practice – with the aim of enabling the farmland properties to be regularized before the end of 2015.

Meetings were held with the people being resettled throughout the whole of the process of regularization, to establish bonds of partnership, enabling all the demands of the community to be met. From 2009 through 2015 Cemig organized 13 events for the delivery of the titles to the land, involving various municipalities in the area surrounding the Irapé plant.

The Company gave all the resettled people the right to choose the site where they would wish to live, listening to the anxieties and desires of the riverside population, in such a way as to offer them sustainable conditions for development and survival of their communities – aiming to preserve the history, culture, family and social bonds of all those affected by the construction of the Irapé Plant.

CORPORATE CITIZENSHIP AND PHILANTHROPY

In line with its Vision, Mission and Values, Cemig creates shared value, joining philanthropic strategies and corporate citizenship with business objectives, and promoting economic and social development of the communities in which it operates. Fostering this social transformation of local communities was one of the themes identified in Cemig's materiality matrix that reinforces the aspirations and expectations of its various stakeholders.

To this end, Cemig has developed a strategy for sustainable community development, creating sustainable value in partnership with government entities (State Health, Education and Culture Departments, Federal Sports and Health Ministries) and philanthropic institutions (through the AI6% and Account Exemption Programs). Employees can also engage through the AI6% program and their Voluntary Work Group, and members of the public also make donations through the *Programa de Apadrinhamento* (Individual Sponsorship Program) by adding contributions to their monthly power bills.

Operating in an emerging market, Cemig has defined the priorities of its strategy for corporate citizenship and philanthropy as follows:


- social and educational development;
- strengthening of the cultural sector; and
- growth in the sports sector, strengthening the Company's brand and image in the market and in society.

Cemig's Sponsorship Policy is a document that reiterates the Company's commitment to management transparency, making public the funding assumptions, underpinnings and origins that guide its decisions regarding sponsorships, support programs, partnerships and the use of federal incentive laws in its various social, cultural and sports investments.

Cemig also has an internal Service Instruction (No. IS58 – Preparation and Management of Corporate Social Responsibility Projects) which establishes duties and responsibilities for all agents involved, designed to ensure sound management of

social projects.

The following Cemig programs, which strive to enhance social and educational development, are particularly notable:

- the Grant Program;
- the Individual Sponsorship Program;
- the Corporate Volunteer Program, including program Al6%;
- Health, Culture and Sports Projects; and
- The Energy Efficiency Program 

Described in the Clients and Consumers chapter, in the item Energy Efficiency and Conservation.

Through the Grant Program, Cemig offers philanthropic institutions a 25% discount on electricity bills, calculated on average consumption over the last 12 months. To participate, entities must have a Certificate of Good Standing issued by the State's Development Department. In 2015, the program's discounts benefited 1,050 organizations, with discounts totaling R\$ 7.8 million. The savings generated can be used for social welfare purposes. For the Company, the program also reduces power bill payment defaults, since only institutions with no arrears can receive the benefit.

In the Sponsorship Program, donations in favor of the institutions are raised from third parties (the 'Sponsors'), by additions to their electricity bills. 100% of these additions are then passed on to the institutions' bank accounts. Sponsors who enroll in the program can choose which registered institutions to donate to, and the amount to be debited on the electricity bill. In 2015, approximately 195 institutions received an aggregate R\$ 48.15 million in donations through the program. Thus, using its electricity billing system, Cemig establishes a partnership with society (clients, who become sponsors of the institutions) that benefits society, and thus also enhances its image as a Company committed to the development of local communities. The institutions, for their part, receive secure donations making use of Cemig's infrastructure and capillarity, without their having any costs of their own on communication or printing of billing or payment slips.

The 'Al6%' Program encourages Cemig employees and retirees to transfer up to the allowed 6% of their income tax payment to *Fundos da Infância e da Adolescência - FIAs* (Funds for Children and Teenagers). The funds go to:

- actions to protect and defend the rights of children and adolescents in a situation of risk or vulnerability;
- actions of protection against violence;
- programs combating child labor;
- programs of work training for adolescents; and
- initiatives of orientation, family support and socio-educational measures.

The 2015–16 campaign involved participation of 1,782 employees of Cemig voluntarily allocating funds to 101 municipalities to benefit about 25,000 children and adolescents attended by 196 institutions. The amount allocated by the employees was R\$ 1,207,957. The Company also allocates part of the income tax due for the same FIAs and invested R\$ 1,265,160. In total, R\$ 2,473,117 was allocated to serve approximately 25,000 children and teenagers.

In 2015, through a partnership between the Organizing Committee of the Al6% program – *Formando Cidadãos* (Forming Citizens), the Group of Volunteers from Cemig's Social Responsibility Committee, *UniverCemig*, Cemig's Energy Efficiency Management, and the *Centro Mineiro de Alianças Intersetoriais – CeMAIS* (Minas Gerais State Inter-Sector Alliances center), were trained a total of 50 institutions benefiting from the Program Al6% who participated in the training program *Jornada de Conhecimento Compartilhado* (The Shared Knowledge Journey).

This training is the result of considerable thinking and reflection about the reality of Third Sector entities. It aims to contribute to the technical training of professionals so that they can administer their organizations with an entrepreneurial sense of opportunity, without losing sight of the perception of the socio-economic, cultural, political and ethical development of society

in which they are involved.

By fostering and promoting contact between these institutions and qualified professionals, Cemig aims to empower them, so that they can operate with an even greater degree of professionalism, making the actions that they take in favor of children and adolescents, and for the good of society, more effective.

Corporate Volunteer Program

Aiming to expand engagement of its employees in social causes, in 2014 Cemig changed the structure of its Social Responsibility Committee. It now includes a group of Company volunteers who are responsible for establishing the guidelines and standards of the Corporate Volunteer Program, organizing and managing voluntary initiatives in alignment with corporate strategy. The committee encourages and supports the involvement of its employees in volunteer activities that benefit communities.

This is in fact a revitalization of an existing program Cemig has run for many years, based on initiatives that have been very successful with its employees. Highlighting two of these:

- **Al6%:** previously reported in this item.
- **Dia V (V Day):** a date focused on mobilizing and fostering solidarity actions, held annually in a previously selected community. It is conducted in partnership with several Cemig group companies to encourage employees to volunteer.

In 2015, 15,904 hours were dedicated to the Volunteer Program, including its planning and organization, as well as technical visits and participation in courses and conferences by members of the Corporate Volunteer Group – resulting in an average of 2.02 hours/employee.

In Health, Cemig participated for the third consecutive year in Health Ministry Programs in conjunction with the government of *Minas Gerais* through the Health Secretariat, as follows:

- **Programa Nacional de Assistência à Saúde (Pronas)** – National Program for Health Care, benefiting 5 entities;
- **Programa Nacional de Apoio Oncológico (Pronon)** – National Program for Oncology Support, benefiting three entities in *Minas Gerais* state.

Strengthening the cultural sector is also one of the Company's Corporate Citizenship priorities. By promoting culture, Cemig benefits local society by generating leisure opportunities, while also preserving the memory and identity of the communities where it operates – and also the Company's own history, as Cemig itself has strong national and local cultural roots. The practice also strengthens Cemig's reputation with the various stakeholders, as a Company that is a guardian of cultural heritage and stimulates artistic expression.

Cemig partners with the *Minas Gerais* State Culture Department in its cultural initiatives, a policy that ensures alignment with public policies – a strategic factor for actively choosing projects it wants to sponsor or wishes to participate in to assure continuity of structuring actions in this field.

The two main programs are:

- **Cemig Cultural:** A program that encourages research and development of artistic languages – entrance is free of charge – and thus has become a base investment for the development of the cultural market, helping sustain permanent education spaces.
- **Filme em Minas ('Film it in Minas')**: A program to stimulate audiovisual creation, which has significantly stimulated audiovisual production in the state of *Minas Gerais*. It encourages adoption of new languages and formats that reveal

the state's cultural plurality and diversity.

The culture sponsorships were of a total of 52 projects in 2015, with investments totaling R\$ 6.38 million in the Company's own funds, and R\$ 12.65 million in passthrough of public funds under the cultural incentive funding laws.

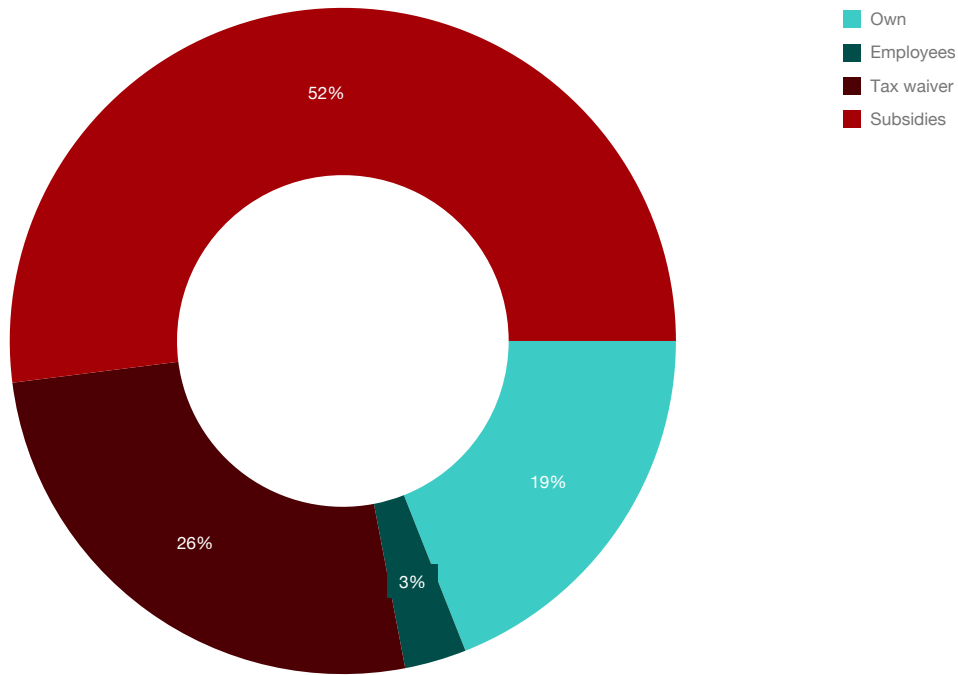
Another one of the Company's objectives is to uphold Cemig's commitment to the realities and demands of the local environments in which it operates, contributing to the development of sports in line with public policies enacted by communities. For the community, the program helps meet social recovery and citizenship goals, especially for children and teenagers, by encouraging sports and generating opportunities for local youths to become athletes. For Cemig, it enhances its image as a Company committed to the development of healthy habits and the welfare and development of the communities involved. In 2015, the Company invested a total of R\$ 1.94 million in sports.

This table shows the amounts of social investment:

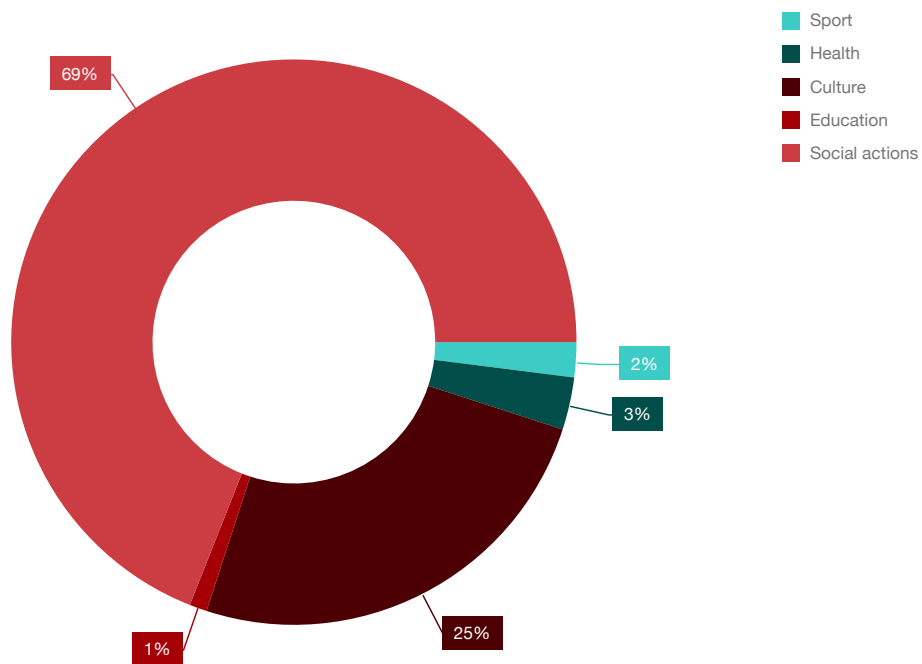
AREA OF INVESTMENT	2015 (R\$)		
	OWN	TAX WAIVER	TOTAL
Culture	6,379,129	12,655,890	19,035,019
Education	455,000	-	455,000
Sport	-	1,939,200	1,939,200
Social Actions	7,800,000	44,582,607	52,382,607
FIA, AI6% and Donations	7,800,000	5,483,310	-
Subsidies	-	39,099,297	-
Health	-	1,939,200	1,939,200
TOTAL	14,634,129	61,116,897	75,751,026

AREA OF INVESTMENT	2014 (R\$)		
	OWN	TAX WAIVER	TOTAL
Culture	7,438,611	19,377,222	26,815,833
Education	-	286,950	286,950
Sport	-	5,425,102	5,425,102
Social Actions	6,734,440	57,040,099	63,774,539
FIA, AI6% and Donations	6,734,440	5,527,301	-
Subsidies	-	51,512,799	-
Health	-	9,485,692	9,485,692
TOTAL	14,173,051	91,615,065	105,788,116

Origins of funds used



Areas of Social Investment



ENVIRONMENT

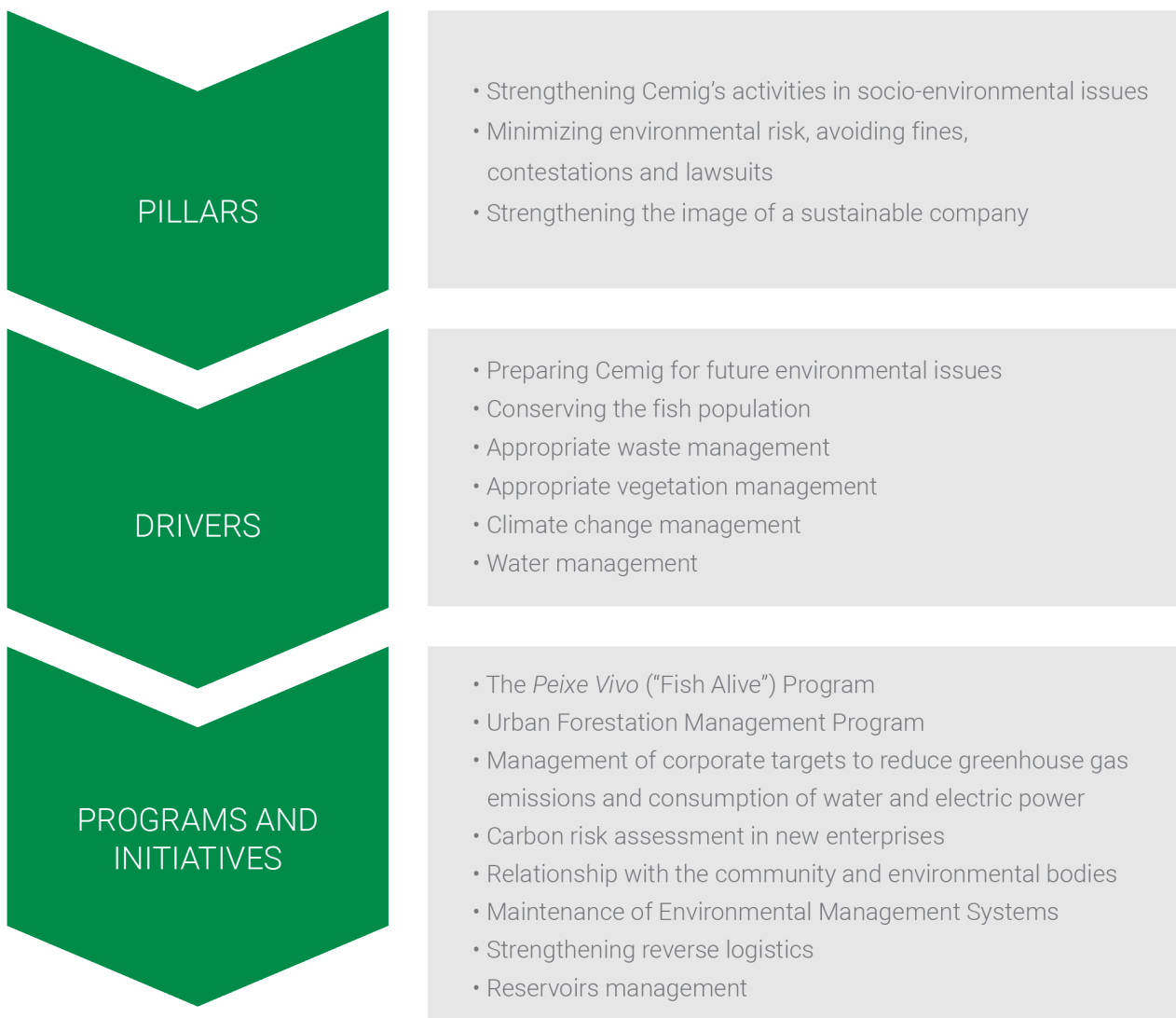
ENVIRONMENTAL STRATEGY

Cemig's environmental strategy seeks to balance development, environmental protection, preservation of biodiversity, rational use of natural resources, and compliance with environmental legislation, with the Business Mission and Vision and the Company's Strategic Planning. Its formulation takes into account current and future risks and opportunities, challenges, medium and long-term scenarios and the expectations of the public with whom Cemig interacts. All of this process is oriented

by Cemig's **Environmental** and **Biodiversity** policies, its **Climate Change Commitment** and also internal procedures. These documents were prepared to highlight the alignment of the Company's planning and strategic management with the sharing of value with employees and with society in regions where it operates.

The Socio-Environmental Compliance Program is multiannual and takes a cross-sectional approach throughout Cemig. It is the tool that details corporate strategy at a tactical level, in which the strategic guiding points are established. Through a prioritization matrix, the operation of the strategy is driven based on definition of programs and initiatives with their respective responsibilities, actions, targets, goals, indicators and allocation of resources – comprising topics such as: Biodiversity; Water; Solid Wastes and Climate Change. The targets relative to these and other topics are shown under the item **Strategy** in this report.

Cemig sees the involvement of its many stakeholders through activity networks and building of partnerships – which help prepare and implement all programs – as being of fundamental importance. The environmental strategy, and its tactical and operational implementation, are presented below.




The Socio-Environmental Compliance Committee, composed of representatives of Cemig's departments, periodically monitors the implementation of the Socio-Environmental Compliance Program.

ENVIRONMENTAL MANAGEMENT

Cemig's environmental management is based on its policies and directives, which are aligned with the Company's strategic planning and cover all of the operation and support processes from planning through construction and operation, up to final decommissioning of facilities. The structuring of these management systems ensures that their basic premises are assumed and applied throughout the whole Company's workforce.

Cemig is aware of its important role in society as a user of natural resources, and continually seeks to ensure that these resources are used sustainably, with prevention of pollution, and with eco-efficiency in its processes.

Cemig's Environmental Management System (SGA) enables adoption of best practices for minimizing of environmental risks and optimizing of operational costs. Acting preventatively, the system aims to minimize possible environmental impacts, reduce the number of environmental events, give employees appropriate preparation for dealing with emergencies, and achieve greater assertiveness in conduct of the environmental strategy and the commitments assumed within the bodies in authority. Through the adoption of Brazilian Standard NBR ISO 14001:2004, or of its own internal management system, named SGA Level 1 

SGA Level 1: Certification of the Environmental Management System under NBR ISO 14001 is only possible for areas that already have the environmental license; and since many of the facilities were built prior to the environmental legislation, they are currently in the process of corrective licensing with the environmental authorities. These facilities had effective Environmental Management practices, but were impeded from obtaining certification. For this purpose, Cemig developed its SGA Level 1 as a step toward certification under ISO 14001. In practice, over time, as these facilities obtained their environmental operating license, they subsequently, at the first external audit, were recommended for certification under ISO 14001 – which is an indication of the rigor of the practices of SGA Level 1.

, which

was developed on the basis of NBR ISO 14001:2004, the various departments of the Company can conduct their activities in a controlled manner and focus on compliance with the legal requirements that are applicable to environmental management.

To ensure control, both systems are verified by independent audits carried out by a certifying organization registered with and approved by Inmetro.

Independently of certification under the Environmental Management System, 100% of Cemig's activities are required to comply with the [i.e. its own] minimum environmental requirements, which are ruled by an internal procedure and periodically audited by the Company's Internal Auditing Department. The table below shows the data for the coverage of Cemig's Environmental Management System. It ensures 100% coverage of the electricity generated, transmitted and distributed to consumers:

COVERAGE OF THE ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) IN CEMIG			
ACTIVITY	ISO 14001	EMS LEVEL 1	MINIMUM REQUIREMENTS ⁴
Generation ¹	52%	46%	2%
Transmission ²	72%	28%	0%
Distribution ³	1%	6%	93%

¹ Figures indicate coverage as % of total MW generated.

² Figures indicate coverage as % of total length of Cemig GT's transmission lines.

³ As % of all consumers.

⁴ The minimum requirements apply only where the EMS is not in place – neither based on 14001, nor Level 1.

Environmental compliance

As well as being a legal obligation, environmental licensing of Cemig's activities aims to ensure that its operation and expansion take place in compliance with environmental and sustainability criteria, and in accordance with the Company's environmental policy.

Environmental licensing can have a preventive character (in the case of new facilities) or a corrective function (for facilities that are already built). For the environmental licensing of the facilities completed before 2007, the Company has grouped them by region, dividing the system into seven regional networks: Central, East, West, North, South, *Mantiqueira* and Triangle. At present, five of the seven regional networks already have licenses, while the Center and East Networks are in the process of analysis by the environmental authority. Cemig D now has 78.6% of its facilities licensed, and 21.4% in the licensing process. Cemig has reached the target of 100% compliance in the period stipulated for obtaining the environmental licenses. This result is verified by the indicator General Index of Environmental Licensing Deadline (*IGPL*), which has reached the target of 100% in the last few years.

In all it does, Cemig works to minimize the adverse impacts of its activities, through specific studies, monitoring, raising of awareness and training of its workforce. Environmental factors are taken into account in the economic and physical planning of all its projects. Cemig GT now has 75.3% of its projects duly licensed, and 24.7% in the process of obtaining the related environmental licenses. All the requirements of law and the regulatory bodies have been met by Cemig within the periods stipulated, and the Company is awaiting release of these licenses. The licenses are monitored by a software, and periodically audited, in full continuous improvement of the process. There are specific indicators such as the *ILOI* - Environmental Licensing Index for Operation of Facilities. This index expresses the percentage of Generation and Transmission facilities in operation that have environmental licenses in force. Maintaining environmental compliance, by obtaining the various licenses, and permanent compliance with the conditions set for maintenance of the licenses, avoids consequences of non-compliance with the legal obligation, which can include sanctions, penalties or fines.

The risks related to the environmental licensing process are described in the [Reference Form](#) and in the [20F Form](#).

Funds Invested

In 2015, Cemig invested approximately R\$ 53.8 million for environmental purposes. Funds used for waste management totaled R\$ 1.5 million. Expenditure on R&D projects was R\$ 8.5 million; and the remaining R\$ 43.8 million was spent on compliance with environmental constraints, and environmental improvements. As mentioned in the Environmental Strategy section, the Socio-Environmental Compliance Committee periodically reviews the prioritization and allocation of these resources.

The environmental investments were subdivided into capital investments, expenses and R&D projects as follows:

FUNDS INVESTED IN ENVIRONMENT (R\$)					
	2011	2012	2013	2014	2015
Capital expenditure	10,970,000	16,960,000	6,579,000	3,872,000	6,819,664
Total expenses	36,820,000	35,810,000	35,779,958	37,219,780	38,527,936
R&D	5,579,625	6,663,207	10,017,000	11,746,000	8,492,661

Materials

Materials consumed by Cemig from non-renewable sources, and those with greater intensity of use and operational significance, along with the respective quantities consumed, are described in the table below. There was a significant reduction in materials for street lighting. This is because a change in federal legislation transferred responsibility for street lighting to the municipalities. The residual consumption figures shown are for works that have already been agreed between Cemig and some prefectures in the *Minas Gerais* State.

YEAR	DISTRIBUTION TRANSFORMERS (units)	CONCRETE POLES (units)	CABLES (m)	CABLES (kg)	METERS (units)	PUBLIC LIGHTING (LAMPS, RELAYS, REACTORS, FITTINGS, ARMS, PLUGS, IGNITERS, ETC.) (units)
2011	7,138	36,729	9,941,812	2,038,986	761,259	1,094,624
2012	13,393	49,001	11,915,226	2,606,570	548,993	744,091
2013	14,209	52,243	10,795,817	2,684,791	843,185	734,429
2014	11,938	38,598	8,901,101	1,453,548	480,704	698,406
2015	16,237	39,530	8,927,891	1,316,413	555,390	42,107

Waste

Reverse logistics and final disposal of waste are responsibility of an area that is certified at Level 1 of the Environmental Management System (SGA Level 1). This area receives waste that has been duly identified, separated and packed by the areas that generated it. In 2015 approximately 48,300 tons of industrial waste was disposed of in an environmentally appropriate manner: 99.8% was sold, recycled or regenerated and 0.2% co-processed, incinerated or sent to industrial landfill.

The waste that is disposed consists mainly of cables and wires, scrapped transformers, metal scrap, scrapped meters, poles, cross-arms, and wood shavings and residue. The sale of 48,100 tons of waste generated R\$ 12.9 million, an increase of approximately 42% over the previous year's revenues from the same source.

In 2015, R\$ 193,300 was spent to dispose of 194.2 tons of solid waste impregnated with oil, light bulbs, solvents, IPEs, fiber and glass wool waste, and insulating mineral oil. This was 20.2% less by weight than in 2014, due to less waste impregnated with oil, light bulbs and solvents being generated in 2015.

From the total of oil wastes disposed of, 32.3 tons of insulating mineral oil were regenerated and reused by the Company. This measure, as well as offering environmental benefits such as non-generation and processing of contaminated waste, enabled Cemig to save some R\$ 272,000 in oil acquisition expenditure, without taking into account waste disposal costs.

The total of wastes impregnated with oil was reduced by about 44.1% from the previous year, due to greater control in the activities of equipment maintenance, which also contributed directly to reduction of the costs of final disposal by R\$ 36,500.

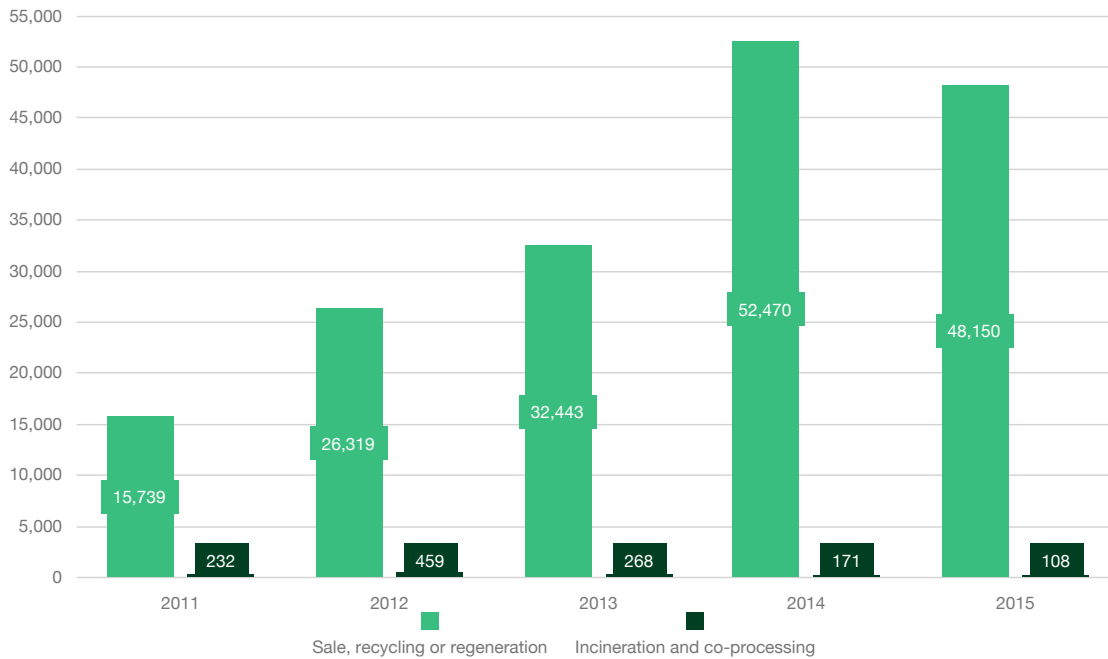
There were no significant spills or leakages in 2015.

EN2

EN3

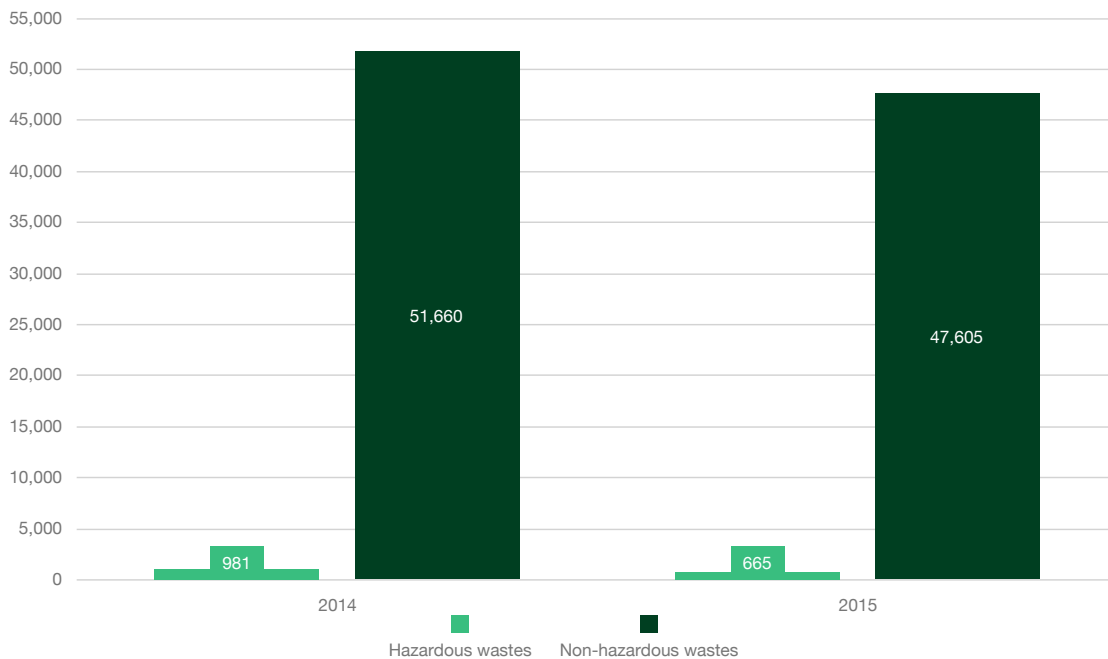
EN4

Final disposal of wastes (t)*



* Waste sent to landfill in 2015 = 12 t

Hazardous and non-hazardous wastes (t)



Any electrical equipment contaminated with PCBs, when taken out of operation, is sent for decontamination or thermal destruction by a Company that has a license to carry out this service.

ENERGY

EN3

The following table shows the energy consumption by Cemig, broken down by type:

TOTAL CONSUMPTION OF ENERGY (GIGAJOULES – GJ)									
YEAR	ELECTRICITY	YOY CHANGE %	FUEL: FOR FLEET, EMERGENCY GENERATORS, EQUIPMENT AND MACHINERY*	YOY CHANGE %	FUEL: FOR THERMAL POWER PLANTS	YOY CHANGE %	TOTAL	YOY CHANGE %	
2011	168,740	+0.60	202,931	-7.40	101,315	-65.24	472,986	-30.27	
2012	159,345	-5.57	183,195	-9.72	545,986	+438.90	888,526	+87.85	
2013	157,487	-1.17	176,972	-3.40	1,923,927	+252.37	2,258,386	+154.17	
2014	158,993	+0.96	173,856	-1.76	8,044,681	+318.14	8,377,530	+270.95	
2015	160,042	+0.66	165,024	-5.08	1,965,111	-75.57	2,290,177	-72.66	

* The figures of fuel consumption for the fleet were recalculated for 2013 and 2014, considering the Diesel S-10 consumption.

Total energy consumption was 72.66% lower in 2015 than in 2014. This was mainly due to ending, in December 2014, of the commercial contract with Usiminas to operate the *Ipatinga* thermo power plant; and also the lower total time of operation of the *Igarapé* TPP (1,502 hours in 2015, vs. 6,541 hours in 2014), and the *Barreiro* TPP (6,641 hours in 2015, vs. 7,794 hours in 2014).

Despite the small increase in electricity consumption in 2015, Cemig's electricity consumption reduction target was met – consumption down 5.2% compared to 2011 – the target base year.

For further information about Cemig's Goals and Targets, please [click here](#).

The fuel consumption of Cemig's vehicle fleet has been reduced by 3.71% from 2014 to 2015 – a saving of approximately R\$ 1.8 million. Since 2011, Cemig reduced its annual consumption by 18.31%, that is to say, a reduction of more than one million liters in the last five years. This reduction in consumption is due to renewal of Cemig's vehicle fleet under the program to replace the entire fleet begun in 2010, and with constant optimizing of the fleet since then. This optimization over this period was possible because all vehicles replaced in 2010 came with the Electronic Management System installed. This enables the use of the vehicles to be constantly monitored. The total number of vehicles was reduced by 628 from 2011 to 2015.

This table gives Cemig's various electricity generation sources, by installed capacity and net total generation. It should be noted that 98.8% of the power generated comes from sources that do not emit greenhouse gases.

CEMIG'S TOTAL GENERATING PLANT									
Source	Installed capacity – MW				Net generation – MWh				
	2014	%	2015	%	2014	%	2015	%	
Hydroelectric	6,950	96.8	7,233	97.4	25,110,028	95.4	18,609,916	98.0	
Thermal – fuel oil	131	1.8	131	1.8	742,967	2.8	167,645	0.9	
Thermal – process gases	53	0.7	13	0.2	327,339	1.2	53,975	0.3	
Wind power	49	0.7	49	0.7	142,909	0.5	158,003	0.8	
TOTAL	7,182	100	7,426	100	26,323,243	100	18,989,539	100	

The data above refers to Cemig GT and consortia, *Aliança Energia* and wholly owned subsidiaries 

For further information on Cemig's stake in its subsidiaries, please see page 132 of the document available on: <http://cemig.foinvest.com.br/enu/13421/Cemig%20H%20-%204T15.pdf>

The installed capacity of thermal plants (by process gas) was reduced due to the end of commercial operation of *Ipatinga* TPP.

WATER


Cemig's generating capacity is predominantly hydroelectric. In the last 15 years, 44 projects totaling 1,831 MW have been added. Currently - including the figures for plants of Cemig's investees' companies - a total of 84 plants, with 7,800 MW, represent 95.53% of the Company's installed capacity and more than 3,500 km² of managed reservoirs.

Since water is the main raw material for Cemig's electricity production - and a resource that is sensitive to changes in climate, vulnerable to the consequences of exploitation of other natural resources, seriously impacted by human activities and subject to the regulatory environment - Cemig takes water management and conservation issues very seriously.

The dispatching of the hydro and thermal plants in the Brazil's National Grid (*SIN*) is under responsibility of the National Electricity System Operator (*ONS*). The *ONS* is a private-law, non-profit, civil association established on August 26, 1998 by Law 9648/1998, as amended by Law 10848/2004 and regulated by Decree 5081/2004. It is responsible for coordinating and controlling the operation of plants for generation and transmission of electricity in Brazil's National Grid, under the inspection and regulation of National Agency of Electricity (*Aneel*).

Cemig's operation of reservoirs for generation of hydroelectric power essentially requires consideration of the multiple uses of water by other users in a river basin, and this in turn, leads to the need to take into account a range of constraints - environmental, safety, irrigation, human consumption, waterways and bridges, among others - which Cemig rigorously respects. In periods of severe drought, as experienced from 2013 to 2015, monitoring and prediction of reservoir levels, and constant dialog with government, civil society and users, have been central to ensuring continuity for both power generation and also other uses of this vital resource.

Três Marias – Managing water's many uses

In the last four rainy seasons rainfall was up to 60% less than the historic average in the *São Francisco* River Basin, where Cemig's *Três Marias* hydroelectric plant is located. Cemig met with many of the basin's stakeholders to arrange joint actions to safeguard the multiple uses of the plant's reservoir. As a result, even with the depletion of the reservoir, the *Três Marias* plant was able to contribute to the continuous supply of water to the city of *Pirapora*, and also to other users downstream, such as the *Jaíba Project* 

The *Jaíba Project* employs approximately 20,000 liters of water per second, in irrigation of 24,000 ha – which produces 50% of the seeds used for agriculture in Brazil, and approximately 480 tons per day of fruit and vegetables. This consumption is equivalent to the quantity of water used by the whole city of *Belo Horizonte* every single day. Source: *Universo Cemig Magazine*, edition 13, December 2015.

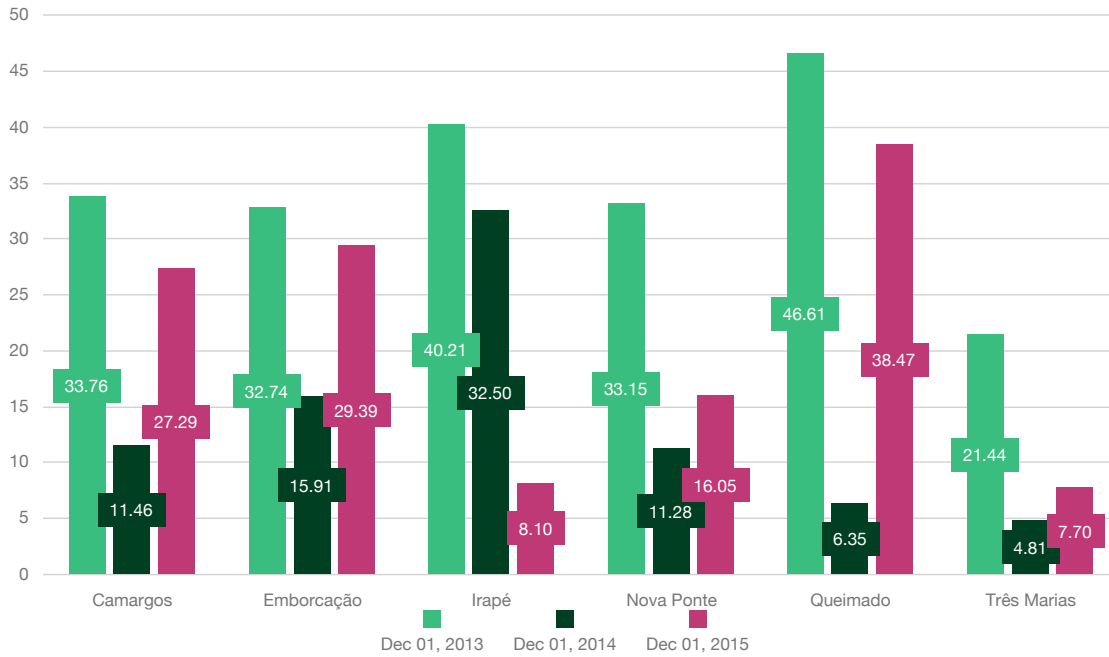
, an important agricultural center in the North of *Minas Gerais* State. This integrated action involved the following partners: the National Water Agency (*ANA*), the National Electricity System Operator (*ONS*), the *São Francisco* Valley Development Company (*Codevasf*), the *Pirapora* and the *Jaíba Project* irrigators associations, the Federal and the State Committees for the *São Francisco* River Basin, and municipalities located downstream on the *São Francisco* River and surrounding the *Três Marias* lake.

Cemig's reservoir management measures – such as downstream environmental tests, setting of new machinery operating levels, simulation studies of future reservoir storage quantities and of multiple-use downstream water capture point levels – made it possible to avoid depletion of the reservoir's stock of water. In spite of a partial refilling of the reservoir of the *Três Marias* plant at the end of the rainy season of 2015 – reaching the level of 37.8% – the Northeastern region of Brazil suffered from the lack of rainfall, which caused accentuated depletion of the *Sobradinho* reservoir, downstream from *Três Marias*. Aiming to support the reservoir of the *Sobradinho* plant, meetings were held every two weeks with the stakeholders referred to above, and reductions of flows at *Sobradinho* were negotiated, with increases in flows from *Três Marias*. With this, even though *Três Marias* was depleted to 6.5% in December, it was possible to support the *Sobradinho* reservoir to avoid it reaching the 0% level before the start of the new rainy period. At that moment, new policies for the plant's water flow control were discussed and approved by

stakeholders for the 2015-2016 rainy season, aiming to replenish the lake and prepare for any scarcities in the 2016 dry season.

The following chart gives data on water storage at Cemig’s main reservoirs on December 1, 2015, compared to the same time in 2014 and 2013 – it shows the lower availability of water in this period, which led to significant depletion of the storage inventory of these reservoirs.

Water Availability – Active Storage (% over total)



Cemig makes available daily data on the levels of some of its reservoirs on its [website](#).

Even though its hydroelectric generation process *per se* does not consume water, Cemig is a major user of this resource and, therefore, actively participates in joint decision-making bodies and forums, monitoring and proposing decisions for the electricity sector, and helping reconcile the multiple uses of water in the river basins. It participates in all water resource forums in its field of business, such as the National and State Water Resource Councils, River Basin Committees, Technical Chambers and Working Groups. With its efforts focused on *Minas Gerais*, Cemig is a participant in 20 state and five federal River Basin Committees. It also is a member of the Brazilian Electricity Generation Companies’ Association (*Abrage*), and in 2015 served as coordinator of the Water Resources Working Group (*GTRH*). For more details on Cemig’s participation in institutional organizations, please [click here](#).

Cemig periodically reviews water management indicators, which demonstrate the Company is moving toward meeting its targets and makes it possible to intervene when necessary. Of particular note is the Efficiency Index Energy Planning of Plants (*IEPE*), which measures the efficiency of the energy operations of Cemig’s hydroelectric plants, comparing actual power generation with optimum generation levels. It considers observed flows, maintenance of generating units and compliance with operational constraints. This indicator is aligned with the corporate map (Generation business), linked to the strategic objective "Increase operational efficiency". A higher result means water-use planning for power generation is better. In 2015, because there were practically no overflows in the plants because of the low water inflows, the *IEPE* result exceeded the target of 94%, reaching 94.9%. The target of 94% has been maintained for 2016.

Another indicator applied, Non-Compliance with Operating Restrictions, or *NARO*, reflects the number of operating constraints

- environmental, electrical, availability of generating units, flood control and minimum levels, etc- that have not been complied with in the operation of Cemig's reservoirs. This indicator is aligned with the corporate map of the Generation business in terms of ensuring reliability of operations, and has a direct impact on results, since failure to comply with operational constraints carries risks to the Company's image as well as costs associated with any damages to society or regulatory fines. This is a dimensionless indicator which monitors the type of restriction violated (e.g. environmental, flood control, electrical, related to generating units, etc). In 2015, Cemig remained within the stipulated target.

To fully ensure regularity in relation to the various uses of water, grants directly related to energy generation are linked to technical studies of the project. These studies take into account the regulated flow, reservoir characteristics and dam requirements. Cemig manages 220 water resources use processes, which are related to all of the Company's activities, of which 39 are processes of registry for only minimal use and 181 are grant processes.

This [link](#) accesses the map showing Cemig's grant locations.

Risk analysis

Based on its Risk Management System, Cemig analyzes scenarios and determines the degree of financial exposure aiming to support the Company's strategic decisions and to establish control measures. Currently, the following risks have been mapped: silting up and rupture of reservoirs; weather forecasting deviations; loss of SHP physical offtake guarantee levels due to decreased water availability; regulatory and price structure changes; and potential conflicts with other stakeholders (which might result either from prolonged drought or from floods due to excessive rainfall). For more details on this subject, see:

http://cemig.infoinvest.com.br/enu/12506/Form%2020F%202014_SEC.pdf

http://www.cemig.com.br/en-us/Company_and_Future/Sustainability/Documents/CDP2014_english.pdf

Dam safety

EU21 The safety of Cemig's dams is grounded on best Brazilian and international practices at all stages of the process. The safety program involves field inspections procedure, collection and analysis of instrumentation data, planning and monitoring of maintenance services, analysis of results and classification of structures. Inspection frequency is based on structure classification. Each dam's vulnerability is continuously and automatically calculated and monitored by the Dam Control and Safety System (the '*Inspector*' system). Developed through an R&D project, *Inspector* incorporates tools that provide georeferenced data on any deterioration, enabling comprehensive analysis of each dam's behavior.

Both Cemig's own professionals and a multidisciplinary team of recognized independent consultants regularly conduct safety reviews. These reviews go into all questions related to the safety of dams, which are carefully investigated by highly-qualified specialists.

Cemig is the Brazilian pioneer in preparation of emergency plans for potential dam rupture scenarios. Studies began in 2003. There are currently specific emergency plans available for each dam, covering the following items:

- identification and analysis of possible emergency situations;
- procedures for identifying malfunction or potential dam break conditions;
- procedures for notification;
- preventive and corrective procedures to be adopted in emergency situations;
- responsibilities; and
- dissemination, training and updating.

Cemig runs in-company training drills for these Emergency Action Plans (PAEs) – testing contact information, communication flow, resources and the emergency response decision-making process among the various individuals involved.

Emergency actions external to the Company, focused on eventual evacuation of people from risk areas, are responsibility of the public protection and civil defense authorities. In this case, Cemig's job is to communicate effectively with these institutions and provide support within its areas of competence and attributions.

Hydrometeorological monitoring

Cemig takes initiatives enabling accurate management of potential impacts on its business resulting from water availability issues. It preventively invests in practices that put it in a safer situation in relation to various possible scenarios. Among the up-to-date techniques and equipment used are the Storm Location System, the Telemetry and Hydrometeorological Monitoring System, mathematical models of hydrologic simulation, and weather and climate forecasting tools.

Cemig currently operates a hydrometeorological network of 241 monitoring points, with 95 for measuring rainfall, 68 for river flow rates, 37 monitoring reservoir levels, and 41 weather stations that monitor rainfall, temperature, humidity, wind speed and direction, solar radiation and atmospheric pressure. These stations are distributed in strategic locations in the States of *Minas Gerais*, *Goiás* and *Espírito Santo*; the data is received in real time at the Company's headquarters in *Belo Horizonte*.

The radar equipment that Cemig acquired in 2011 as the primary tool for improving the accuracy of its hydrological forecasts enables higher levels of operational safety at its hydroelectric plants, and for the general public. It is also of great strategic importance in the control and operation of hydroelectric reservoirs. Through early information about the direction and intensity of rainstorms, it is possible to estimate the amount of water that will reach a reservoir, and thus adjust operations to minimize the effects of floods on populations and on the plant itself. Such ability to forecast also means the Company can issue warnings to Civil Defense authorities about storms that could have serious consequences for the population, making it possible to take preventive action. [Click here](#) for more details.

Water quality monitoring

The quality of water in Cemig's reservoirs is monitored regularly in a network comprising the main river basins in the *Minas Gerais* State, with operations in 42 reservoirs and more than 180 stations collecting physical, chemical and biological data. The monitoring network has been adjusted to improve the support to reservoir water quality management and to comply with license constraints and certain requirements of state and federal resolutions.

The data collected in water quality monitoring generates a large volume of information, which is analyzed and stored, producing a large database (named *Siságua*), which makes it possible to accompany changes to reservoirs and surroundings in space and time.

With the growing demand for environmental information from the public at large and, principally, from the environmental bodies, Cemig makes data of the *Siságua* system available on the internet, aiming to share, with the general public, the information acquired on aquatic ecosystems where the Company has operations. A geographic filter was incorporated into the system in 2015, to improve the user interface for internet and intranet, making consultations easier.

The *Siságua* system was recognized, in 2015, as one of the benchmarking case studies in the 13th Bench Day event, organized by the *Instituto Mais*, which certifies organizations for best sustainability practices. The system received an award in the ranking of Best Socio-environmental Practices of Brazil.

Cemig uses the "Índice de Qualidade das Águas - IQA", or Water Quality Index as a concise and objective means of communicating to authorities, and general public, the influence of development-related activities on the environmental

dynamics of aquatic ecosystems. This index points to the degree of contamination of river waters with organic materials, nutrients and solids which, normally, are indicators of pollution associated with domestic effluents. For further information:

[http://www.cemig.com.br/en-](http://www.cemig.com.br/en-us/Company_and_Future/Sustainability/Programs/environmental_programs/Biodiversity/Pages/water_quality.aspx)

[us/Company_and_Future/Sustainability/Programs/environmental_programs/Biodiversity/Pages/water_quality.aspx](http://www.cemig.com.br/en-us/Company_and_Future/Sustainability/Programs/environmental_programs/Biodiversity/Pages/water_quality.aspx)

The table below shows the *IQA* results in the second half of 2015 for some of Cemig's plants:

PLANT	WATER BODY	IQA		QUALITY LEVEL	RANGE
Cajuru	Pará	88.67		Excellent	90 < IQA ≤ 100
Jaguara	Grande	90.16		Good	70 < IQA ≤ 90
Machado Mineiro	Pardo	82.20		Average	50 < IQA ≤ 70
São Simão	Paranaíba	77.20		Bad	25 < IQA ≤ 50
Volta Grande	Grande	85.00		Very Bad	0 < IQA ≤ 25

To classify reservoirs by degrees of water quality degradation, the *Paraná* Environmental Institute (*IPA*) has developed a *Reservoir Water Quality Index (IQAR)*. Cemig has begun calculating the *IQAR* index for the reservoir of *Volta Grande* plant, as a project of its R&D program, aiming to understand the main trophic, morphometric and hydrological characteristics of its reservoirs and their trends over time. The results of the project so far have classified the reservoir as having a 'low level' of degradation – showing low depletion of dissolved oxygen, high water transparency, low density of cyanobacteria, small amounts of organic and inorganic nutrients, and low water residence time.

Research and Development (R&D) solutions

The results produced by Cemig's R&D Projects are essential to develop innovation in methodologies and solutions for mitigation of effects caused by electricity projects. The aim is to reduce environmental risks and conserve biodiversity in order to promote a sustainable management of water resources.

Cemig through R&D projects promotes actions to protect ecosystems and preserve biodiversity. These projects have developed tools for storing and processing ecological information, correlating individuals, populations and communities with the degree of environmental degradation.

Some Cemig projects have developed innovative methods of assessment of environmental quality of reservoirs of hydroelectric plants using an approach based on the Index of Biotic Integrity (*IBI*) – a case of innovation in methodologies supporting water resources management, also highlighting the solutions associated with the uses of these resources.

All the projects presented below are considered to be unprecedented in Brazil, because as well as exploring little-known areas, they adopt techniques and strategies that are used internationally.

- R&D Project 479 – Use of Ecological Integrity Index to Classify the Quality of Aquatic Environments of *Minas Gerais* State.
- R&D Project 485 – Research and Control of Water Quality in the *São Francisco* River Revitalization Program.
- R&D Project 486 – Research and Control of Water Quality in the *Grande* River Revitalization Program.
- R&D Project 487 – Development of Indexes of Biotic Integrity : benthic macro-invertebrates as indicators of water quality in river basins of Cemig hydroelectric plants in *Minas Gerais* State.
- R&D Project 343 – Control of the golden mussel: bioengineering and new materials for application in ecosystems and hydroelectric plants.

- R&D Project 399 – Developing georeferenced water quality indexes and socio-environmental characterization of reservoir region in cascade: the *Volta Grande* and *Jaguara* plants.
- R&D Project 402 – Application of multivariate chemometric methods in river basin management.

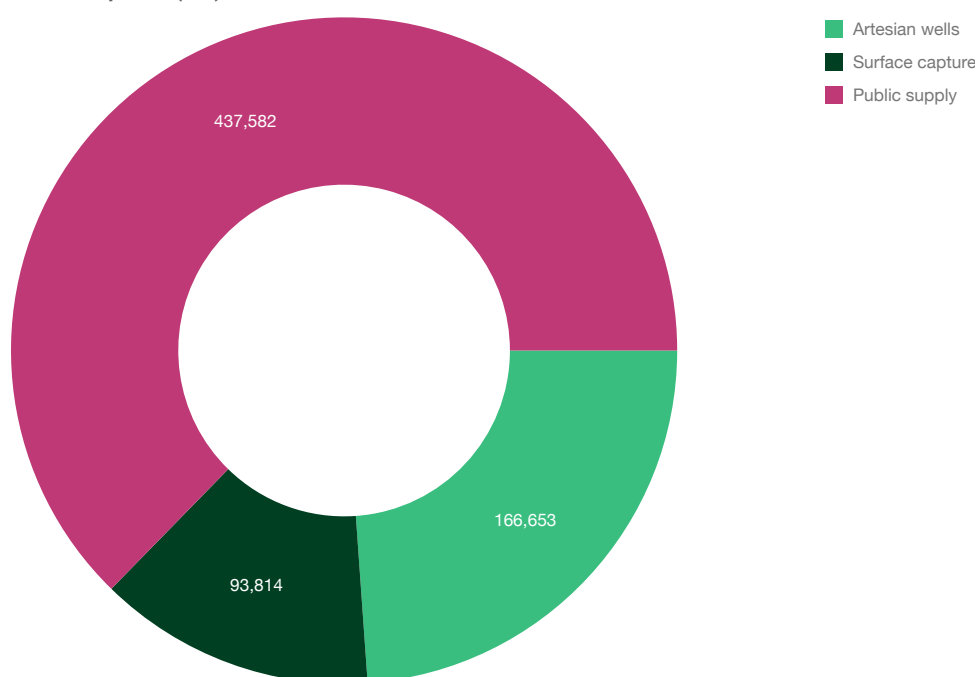
More details on R&D projects developed in Cemig can be consulted at:

<http://sgpdj.cemig.com.br/index.php/64-forms-ajax/99-sistema?MAjax=JGU/#/VISITANTE/Lista>

Water consumption and effluents generation

Cemig's total water consumption in 2015 was 698,049 m³, as shown below:

Total water consumption (m³)



Cemig's total consumption of water for administrative purposes 

The calculations of reduction had to be redone because some Cemig's buildings were de-activated over the period 2011 - 2015.

was

459,925 m³, including public water supply, surface capture and artesian wells 

All Cemig's capture of underground water has the respective grants of rights.

, as shown in the chart below. Over the last four years, Cemig has reduced its administrative water consumption by 34.4%. This reduction is the result of several actions taken by Cemig over these years, such as educational campaigns for more aware use of water, preventive maintenance in water facilities, replacement of old pipes, valves and taps, elimination of leaks, and changes in procedures.

EN8

EN9

EN10

EN22

Water consumption – Administrative (m³)



Consumption of industrial water used for cooling in thermal plants totaled 238,123 m³ – a reduction of 74.2% from 2014. This reduction is mainly due to the end of the contract to operate the *Ipatinga* Thermal Generation Plant (with *Usiminas* – it expired in December 2014), and also to the shorter time of operation of the *Igarapé* and *Barreiro* TPPs during the year 2015.

Water consumption – Industrial (m³)



The water used for the purpose of electricity generation is not characterized as consumption, since all of it returns to the watercourses involved – hence the above figures do not include any reference to this flow.

The target for reduction of total water consumption was achieved: consumption in 2015 was 61.6% below that of 2011.


For more information about Cemig's Goals and Targets, please [click here](#).

The Company's thermal plants do not generate effluents, since the production process at the *Barreiro* thermal plant recirculates the water used; and at *Igarapé* TPP, water is returned to the water body after use. Their water sources include capture from the river surface, and the public supply.

Effluents generated in administrative units are disposed of in public sewage systems, or in controlled septic tanks, and do not directly affect any water bodies. The industrial activity of power generation *per se* does not characterize water consumption, so is not accounted in the figure for Cemig's total consumption. In 2015, 367,940m³ of sanitary effluents were generated.

BIODIVERSITY

DMA

With a predominantly renewable matrix of sources, Cemig and biodiversity are intrinsically interlaced. Cemig's operating area contains two terrestrial biodiversity hotspots 

GC7

Areas that are severely threatened and of great biological importance for the whole planet. : the *Cerrado*, and the Atlantic Forest; and in terms of aquatic ecosystems, Cemig is responsible for managing more than 3,500km² of fresh water in its reservoirs.

GC8

The Company operates in a number of different fields of business. For each project, it conducts special studies to evaluate and establish environmental programs to control, mitigate and compensate negative impacts, and maximize the positive ones - in synergy between research, innovation and practical solutions which, coupled with Cemig's expertise, are able to add value to society and to the biomes in which it operates.

Due to the large number of hydroelectric power plants that Cemig manages, the impacts on fish populations and, consequently, on economic activity related to fishing where these projects are located, are relevant, and raises substantial environmental issues. Cemig thus devotes significant attention and control to these impacts.

Similarly, being Brazil's largest electricity distributor in total length of lines and networks, Cemig understands how seriously vegetation can be affected by electricity lines and, thus, prioritizes actions to mitigate the risks of power outages through sustainable vegetation management practices.

The Company enshrines the importance of these impacts in its Biodiversity Policy.

Fish care

Cemig created and developed its "*Peixe Vivo*" (*Fish Alive*) Program to establish more effective measures for long-term preservation of the fish populations in the river basins where it operates. The principles that orient this work done by Cemig are: adoption of scientific criteria for decision-making; establishment of partnerships with other institutions; changes in the practices adopted, as a result of the information generated; and encouragement for disclosure of the program information to the public at large. The results obtained in the projects underline these principles, and generate scientific knowledge for efficacious decision-making.

A total of R\$6.2 million has been invested in projects and actions for preservation of fish populations, including expenditure on research projects, maintenance of fish culture stations, environmental education, and events centered on relationship with the community. This table shows the main indicators of the Program:

PEIXE VIVO PROGRAM – INDICATORS		2015
Fish Conservation and River Basin Management programs	Investment in fish research and handling projects (R\$)	6,237,460.96
	Affected Biomass (kg) ¹	2,706
Research	Starting in Science (students)	21
	Masters degree (students)	19
	Doctorate (students)	20
	Researchers ²	53
	Scientific output	95
Relationship with the community	Participants in fish repopulation actions	1,676

¹ Measures the amount of dead fish (in kg), resulting from maintenance and operation of plants.

² Comprises post-doctoral students, technical support and researchers.

Fish are directly affected by the process of generation of electricity by hydroelectric plants, and they can be injured or killed. To measure and mitigate this impact, since 2007 Cemig has used an internal indicator that reflects the efficiency of protective measures during maintenance and operation of hydroelectric plants. This indicator - "*Biomassa Afetada*", or "*BA*" (Affected Biomass) - measures the quantity of dead fish (in kg) resulting from maintenance and operation of plants. In 2015 the total biomass affected was 2,706.2 kg. The internal limit established, due to these impacts being inherent to the process, was 1,609 kg. Several operations carried out to reduce the flow through hydroelectric plants had impacts on fish populations, in 2015. These activities were necessary for recovery of reservoirs levels from the effects caused by drought in Brazil's Southeastern Region - which, with the presence of shoals of fish in spillways of generation plants, caused fish deaths in locations where this had not happened before. These events resulting from change in the load of a plant took place, for example, at the *Nova Ponte* and *Volta Grande* hydroelectric plants. Another event with a strong impact was the closure of the spillway of the *São Simão* hydroelectric plant, which led to a record amount of rescued fish, and 400 kg of affected biomass. Since the *Peixe Vivo* Program was created in 2007, with a methodology for evaluation of the risk of fish deaths developed in partnership with *Minas Gerais* Federal University, there has been a 76% reduction in the volume of fish deaths in the hydroelectric plants of the Cemig Group.

Affected Biomass (kg)



In the period from 2008 to 2015 there were only two occurrences that led to fines. One was in 2012, with a fine of R\$ 27,000; and the other in 2015 with a fine of R\$ 7,000 (reduced by 50% when authorities recognized Cemig's attenuating actions taken, in accordance with the environmental legislation); the fine was finally reduced to R\$ 3,000. For more details, see Cemig's Form 20-F, page 75.

Record of Rescued Biomass: Due to a maintenance that shut down all the generating units of the *São Simão* hydro plant, it required opening and subsequent closing of the spillway of the plant at the beginning of November. At this plant, whenever the spillway gates are closed, the region immediately below the outflow of the spillway forms an area of very shallow water which does not run off, due to the irregular rocky bottom, and this creates several places where fish are trapped. Due to this trapping of fish always is necessary to rescue them at this point. On this occasion, due to the low level downstream from the plant, a larger than normal area was formed, with many locations of fish trapping. A large quantity of fish was trapped in numerous small puddles formed in the irregular parts of the area, and between rocks. Not only the fish rescue team but also the maintenance team were called in to help save the fish. A total of 25 people took part directly in this operation, including members of the environment, maintenance, conservation and cleaning, and security guard teams of the facility. A total weight of affected biomass of 749.9 kg was found, and the total of rescued biomass was approximately 16,200 kg, the largest volume of rescued biomass ever recorded in Cemig operations. Due to this high value of Affected Biomass the Plant's Emergency Plan was activated, and the environmental authorities informed.

Further points of interest on the "*Peixe Vivo*" Program in 2015:

- 95 works related to projects or actions of the "*Peixe Vivo*" Program were published.
- Awards were given for two projects at the 23rd National Electricity Production and Transmission Seminar (SNPTEE).
- The Third Internal Symposium on the Results of *Peixe Vivo* Program Projects - Dam Decommissioning: a case study at the *Pandeiros* Small Hydroelectric Plant, in which employees received a presentation on preliminary results of the R&D Project 550, "Development of tools for prioritization of Small Hydroelectric Plants decommissioning in the *Minas Gerais* State and the *Pandeiros SHP* case study", which was a joint project with the Federal University of *Lavras* (UFLA). This project was designed to evaluate the feasibility of decommissioning and removal of the dam, in relation to the positive and negative consequences.
- The course "Topics in Management and Conservation of Fish Populations for the Electricity Sector" was held in its third edition, at the *Três Marias* plant. Participants had the opportunity to become familiar with the work of the "*Peixe Vivo*" Program in Cemig's plants, and learn about fish and their interactions with hydroelectric plants - and were also taken on a guided tour at *Três Marias* plant.

Cemig has various research and development projects in progress on management of the "*Peixe Vivo*" Program. For further information, please see:

http://www.cemig.com.br/en-us/Company_and_Future/Sustainability/Programs/environmental_programs/peixe_vivo/Pages/default.aspx

The *Cemig Fish Stocking Program* included fish introduction programs at three Cemig stations: *Volta Grande*, *Itutinga* and *Machado Mineiro*; and two stations which are a partnership with *Codevasf*: the *Gorutuba* and *Três Marias* stations. In 2015 there was a change in the focus of the activities of *Volta Grande* station. It began to work exclusively on research projects, no longer carrying out fish introductions.

In 2015 a total of approximately 500,000 fingerlings were produced, with total weight of 12 tons. They were introduced in 52

separate actions in the reservoirs and rivers of the basins where Cemig has activities, involving the participation of 1,676 people from local communities, in 40 municipalities.

Vegetation management

DMA
EN11
EN12
EN13
EU13

Events caused by the various forms of vegetation are one of the principal causes of accidental outages in Cemig's electricity system – a total of 39,668 interruptions in 2015, reducing the quality of the service provided, violation of the quality indicators required by the concession-granting power, causing consumer dissatisfaction, and increasing maintenance costs, as well as being a strong potential source of accidents to third parties. At the same time, the need to interfere in the growth of trees and forest formations can cause damage to public natural assets. The external impacts take the form of a need to intervene in forests, most of them of native species, and urban trees. In the countryside, this intervention takes the form of cutting of vegetation where its growth means a risk to the operational safety of the electricity system. This can contribute to reduction of biodiversity, set off processes of soil erosion, and interfere in the hydrological cycle. In the city environment, the impacts take the form of pruning where growth causes a risk to the operational safety of the electricity system, and also removal of trees with structural weaknesses or disease that represent a risk of their falling, either on the electricity system, or on other urban structures or on people. Potential impacts include degeneration of trees whose growth characteristics can prevent appropriate pruning, the visual aspect of trees after pruning, and possible reduction of their useful life.

NUMBER OF OUTAGES CAUSED BY TREE ACCIDENTS IN CEMIG'S DISTRIBUTION SYSTEM

2011	33,541
2012	32,189
2013	31,337
2014	29,163
2015	39,668

The higher number of interruptions in 2015 is mainly due to more frequent and intense rainstorms than in 2014.

The main risks can be described as follows:

- Increase in the cost of re-establishment of the electricity system due to outages caused by trees, as well as worsening the performance indicators SAIFI (average outage frequency) SAIDI (average outage duration), FSS (Frequency of sustained outages), among others.
- The possibility of Cemig being fined for criminal or administrative infringements arising from conduct harming the environment, under the Environmental Crimes Law (number 9,605 of 1998).
- Reimbursement to the client for interruptions of the electricity system caused by trees; and deterioration in performance indicators SAIFI, SAIDI, FSS, among others – risking infringement of the limits set by the concession-granting power.
- Damage to the Company's image.

Measures to prevent risks and mitigate impacts take the form of procedures for handling of vegetation that reduce the above impacts, in relation to both city and rural vegetation. The procedures are in Cemig's Management Systems, and are adopted by all the areas of the Company whose activities involve dealing with the effect of vegetation on electricity systems. These procedures are also obeyed by outsourced companies contracted to maintain the electricity system – their contracts have a clause making it obligatory to follow these procedures.

In dealing with urban trees, where there is an intimate relationship with urban space planning and municipal administration, the Company maintains a close relationship with these authorities to disseminate tree management practices that can improve the cultivation of trees and reduce the probability of them causing damage due to structural failings. An example is

Cemig's Urban Trees Circuit, a technical event for municipal administrators held annually in various regions of *Minas Gerais* State. These events present and discuss the principal aspects of planning, insertion and maintenance of urban trees, and good tree culture practices. Three phases of this Circuit were held in 2015, in the towns of *Araçuaí*, *Caxambu* and *Arcos* - these events were attended by approximately 300 people from public authorities, NGOs and teaching and research institutions. Cemig is also running research and development projects on the tree management process, and on development of methods for risks evaluation that urban trees present. It also takes an active part in local, national and international forums on tree culture, supporting organizations involved with the subject.

In the countryside, Cemig is the pioneer in development of an Integrated Vegetation Management methodology, which practices selective control of vegetation in power line pathways, making it possible for communities of plants to establish themselves, improving the quality of the environment beneath and around the electricity system.

Cemig prefers to work on mitigation or remediation of negative impacts, and strengthen the positive impacts as indicated by the examples below.

The mitigation of negative impacts on vegetation is made through networks engineering and transmission lines, adopting an infrastructure more advanced in technology, and system design that avoid interfering on vegetation (urban and rural). For more than 15 years Cemig has been using standards for aerial urban electricity distribution systems (protected and isolated networks) that can coexist with large trees, reducing the need for intensive pruning. When necessary, the Company changes the routing of existing networks to avoid interference with areas of high tree density, or even completely reshapes electrical circuits in these areas, using the technological standards referred to above.


In projects for distribution networks or lines in the countryside, Cemig's Route Engineering department gives preference to routes that have the minimum possible interference with forests fragments, and also plans higher structures to minimize removal of vegetation when distribution lines are put in place.

Cemig uses two indicators - the Pruning Service Quality Index (*IQSP*) and the Pathways Cleaning Service Quality Index (*IQLF*) to monitor the performance of its vegetation management process. These indicators are measured monthly for each contract for these services - performance targets to be met in all the contracted activities are specified. From the results of these indicators it is possible to evaluate the quality of services and take contractual measures of correction and prevention whenever necessary, and also offer incentives for performance that exceeds the contractual targets.

Main results in 2015:

- Continuation of the R&D project on Tree Health, with acquisition of a Mobile Tree Health Analysis Laboratory.
- Continuation of the R&D project about creating a computer app for pruning management.
- Inclusion of the Vegetation Management process in the Company's corporate risks management system.
- Evolution of technologically advanced networks, better able to coexist with trees.

The Mobile Tree Analysis Lab – “Lamanar”

This is the result of a Cemig R&D project. It was started in 2012 in partnership with the *CGTI* (Technology and Innovation Management Center )

Non-profit, *CGTI* is an *OSCIP* (Civil Society Organization of Public Interest) recognized by the Ministry of Justice of the Federal Government and the Ministry of Science, Technology and Innovation. It has units in these Brazilian cities: *Campinas*, *Porto Velho*, *Recife* and, the most recent, in *Itajubá*. For further information see: <http://www.cgti.org.br/>, as a

tool for diagnosing the health of trees. It works inside a trailer equipped with devices for rapid analysis of trunks and branches, internal visualization of trunks by mechanical waves or electrical resistance, analysis of trees in the

presence of wind, and visualization of roots under the ground through electromagnetic radar. It is also able to measure distances, heights and diameters, and analyze soil compactness and humidity.

The idea is to facilitate the logistics of storage and availability of equipment in the field and the activities of analysis of trees with instruments. The *Lamanar* is being used in the region of *Pampulha*, in *Belo Horizonte* (capital city of *Minas Gerais* State), for assessment of the methodology recommended by the R&D study.

The *Lamanar* will enable better analysis of the health of trees and their monitoring over the long term, minimize risks, and reduce accidents to Cemig's electricity system caused by falling trees.

Riparian Reforestation Program

This program was begun in the 1990s, under a working agreement with the Federal University of *Lavras* (*UFLA*), with a plant nursery for production of seedlings at the *Itutinga* Environmental Station, and expanded in 1991 to the forest nursery of the *Volta Grande* Environmental Station. The program's initial aim was to develop technology for replenishment of riparian forests around the Company's reservoirs – involving selection of species, development of collection methods and seeds treatment, production of seedlings, application of fertilizers, planting and forest management. Cemig's Forest Seeds Laboratory was created in 1996, in *Belo Horizonte*, to supply seeds to the Company's nurseries, with capacity for production of 1,000 kg per year.

Cemig's forest program has now been restructured: seeds are now supplied by the Federal University of *Lavras*, which, under a working agreement, now operates the Forest Nursery of the *Volta Grande* Environmental Station, and production of seedlings is concentrated there, to meet the whole of the Company's demand – with average annual output of 200,000 seedlings.

The first areas recovered under this working agreement were at the reservoirs of *Itutinga* and *Camargos* hydroelectric plants. This was carried out jointly with the research projects of *UFLA*. These first projects were key in establishing the techniques to be adopted by the Company and also preparation of the Riparian Forest Implementation Manual, document that has guided all the projects carried out since then.

All projects of this type carried out by Cemig are always conducted in partnership with the rural producers around the reservoirs, since these areas are not owned by the Company: Cemig provides the supply and implantation of the seedlings; the landowners provide the areas and commit to maintain them. The greatest achievements in terms of area replanted were at the *Volta Grande* hydroelectric plant, in particular in partnership with sugarcane plants.

Mastery of the complex technologies involved in establishing a native forest with a considerable degree of biodiversity is an aim that is yet to be achieved. New research projects are being started for this purpose, which will evaluate the reforesting activities put in place in these last 20 years, their capacity for regeneration and sustainability over time, and their capacity to attract and maintain new species of flora and fauna around them.

A total of approximately 1,200 ha of Permanent Preservation Areas (*APPs*) have so far been reforested, of which 488 ha alone is in the surroundings of *Volta Grande* hydroelectric plant reservoir. The main projects currently underway are at the *São Simão*, *Emborcação* and *Jaguara* hydroelectric plants, in the *Minas* Triangle region, and at the *Rosal* hydroelectric plant, on the border of the States of *Rio de Janeiro* and *Espírito Santo*.

A total of 3,330 seedlings for urban planting were distributed in 2015, donated by the *Itutinga* Forest Nursery, to 13 municipalities. As well as producing seedlings for urban planting, under working agreements with municipal prefectures, Cemig's forest nurseries also produce seedlings of native species for reforesting of riparian forests at their reservoirs, in tributary rivers and around springs, in partnership with rural producers. This donation of seedlings also extends to NGOs,

prefectures, schools, research institutions and companies that operate in the rural areas. Donations were made to 27 municipalities in *Minas Gerais* State in 2015, relating to eight of Cemig's hydroelectric plants.

In 2015, reforestation activities continued on the banks of the reservoirs of *São Simão* and *Rosal* plants. At *São Simão* this action has been carried out in partnership with rural landowners, with an established target of 40 ha/year of reforestation. In 2015, 29 ha were planted at *Rosal* hydroelectric plant. After the planting, reforestation areas are monitored and undergo maintenance for a period of three years. For further information on Environmentally Protected Areas, production of seeds and seedlings, or other information on biodiversity relating to Cemig, click [here](#).

In its *Aneel* R&D project "Environmental monitoring using patterns recognition in real images of areas covered by transmission lines", Cemig, in a partnership with *Enacom*, *Axxiom*, *UFMG*, *UFVJM* and *DSPArt*, has developed a computer system able to acquire and process images of environmental preservation areas to generate alarms of fire, by web. The alarms are generated using algorithms for detection of smoke and fire – they can be generated individually for each algorithm, or combined. A pilot system at the *Belo Horizonte* Technological Park (*BHtec*) was implanted and validated when a real fire was detected by cameras 3 km distant from the fire. The innovation focus was to make participation in environmental preservation a real possibility for the general public, via the web.

Conservation Units

To conserve biodiversity, Cemig maintains several areas of remaining forests with a high degree of conservation, which are very important for the biomes where they are located. Three of these are classified as Private Natural Heritage Reserves (*RPPNs*) under Federal Law 9985/2000 (which instituted the National Conservation Units System, or *SNUC*); there are a further five, internally referred to as Environmental Stations, which were not included in any of the official categories of conservation units.

CONSERVATION UNIT	PLANT	CITY / STATE	AREA (HECTARES)
<i>RPPN Fartura</i>	HPP <i>Irapé</i>	<i>Capelinha / Minas Gerais</i>	1,455
<i>RPPN Galheiro</i>	HPP <i>Nova Ponte</i>	<i>Perdizes / Minas Gerais</i>	2,847
<i>RPPN Jacob</i>	HPP <i>Miranda</i>	<i>Nova Ponte / Minas Gerais</i>	358
<i>Igarapé</i> Environmental Station	TPP <i>Igarapé</i>	<i>Juatuba / Minas Gerais</i>	105
<i>Itutinga</i> Environmental Station	HPP <i>Itutinga</i>	<i>Itutinga / Minas Gerais</i>	35
<i>Peti</i> Environmental Station	SHP <i>Peti</i>	<i>São Gonçalo do Rio Abaixo / Minas Gerais</i>	459
<i>Machado Mineiro</i> Environmental Station	SHP <i>Machado Mineiro</i>	<i>Ninheira / Minas Gerais</i>	3
<i>Volta Grande</i> Environmental Station	HPP <i>Volta Grande</i>	<i>Conceição das Alagoas / Minas Gerais</i> <i>Miguelópolis / São Paulo</i>	391

CLIMATE CHANGE

DMA

The global importance of debate on climate change underlines the special attention that Cemig dedicates to the consolidation of its matrix of energy sources – which is predominantly renewable; to the identification of the business risks and opportunities; and to the intensification of the quest for solutions for adaptation and mitigation of possible effects that might impact the Company's business.

EC2

EN18

The involvement of senior management, and discussion of the key questions, make this activity more effective, as shown by the establishment of voluntary targets for reduction of emissions, consumption of electricity, and power losses – and it can be noted that Cemig gives this degree of attention to this subject even though it already has low levels of greenhouse gas emissions.

GC7

Cemig identifies potential risks and opportunities for its businesses and seeks solutions to adapt to and mitigate possible effects that may impact them.

The following are aspects of climate change that have influenced Cemig's strategy:

- **Development of low-carbon business:** Cemig has identified business opportunities and potential market advantages as a result of its low-carbon energy matrix, identifying these opportunities as priority in: (i) implementation and renewal of plants generating from renewable sources in which Cemig already has expertise; and (ii) investment in new sources of energy, in particular through its stake in the Company, Renova Energia.
- **Regulatory changes:** Cemig practices environmental due diligence when acquiring new assets (evaluation of carbon risk), to assess the possible financial impact of the asset increasing its greenhouse gas emissions, in view of the possibility of internalization of emission costs as a result of new regulations.
- **Need for mitigation of climate change:** Although it has a low level of GHG emissions, Cemig makes efforts to reduce its emissions, through approaches which include its targets for reduction of emissions, for electricity consumption and for electricity losses.
- **Need to adapt to climate change:** Cemig's generation plants have a low level of GHG emissions, because they are primarily hydroelectric, but as such they are subject to the consequences of climate change. As a result, it invests in: improvement of its climate forecasting systems; improvement of the infrastructure of its plants, transmission lines and distribution networks, to deal with the consequences of this type of event; and improvement of its forecasting of water availability for its hydroelectric plants.

Cemig also takes initiatives in relation to partnerships with the suppliers in its value chain. One of these, over the last three years, is participation in the Value Chain Carbon Management Program, being developed and coordinated by the Brazilian Business Council for Sustainable Development (CEBDS) in partnership with consulting KPMG international and other large Brazilian companies. In 2012–2015, this program has raised the awareness of 312 suppliers regarding climate change, and given them the tools and knowledge to conduct their own greenhouse gas emission inventories based on the GHG Protocol tool. In 2015 the percentage of suppliers (of all the companies) taking part in the process of awareness and training increased to 46%, from 35% in 2014. The training orientation was given to 62 suppliers, and 14 of these completed their emission inventories. A further nine are in the process of preparing them. Of Cemig's suppliers alone, 50 were invited, 18 took part in the process, and so far five have completed their Greenhouse Gas Emission Inventories.

For further information, please see:

http://www.cemig.com.br/en-us/Company_and_Future/Sustainability/Programs/climate_changes/Documents/CEBDS%20Gestao%20de%20Carbono_ING%202014.PDF

At the other end of the value chain, Cemig also offers initiatives to electricity consumers. The **Smart Energy Program** aims to promote energy efficiency in low-income communities, non-profit institutions and public facilities that are consumers of Cemig's supply. And Cemig also has a wholly-owned subsidiary operating in energy efficiency, Efficientia, which since 2002 has been installing energy efficiency projects on the premises of Cemig consumers – mainly industrial clients.

See details on Cemig's initiatives relating to climate change on the Company's website:

http://www.cemig.com.br/en-us/Company_and_Future/Sustainability/Programs/climate_changes/Pages/default.aspx

CDP – Climate Change

Cemig has responded to the annual questionnaire issued by the London-based CDP – *Carbon Disclosure Project* –

since 2007. CDP is an international non-profit organization that encourages sustainable economies. In its report, Cemig makes a rigorous survey of risks and opportunities for its business arising from climate change, and its measures for monitoring and control. Cemig sees the CDP as a management tool, in a context of increasing production of information and consistency in carbon management initiatives.

Cemig has been recognized as a leader in Brazil for the quality of its information on climate change, as published to investors and the global market through the CDP. As a result it was included in the Climate Disclosure Leadership Index (CDLI) published in the 2015 Latin America edition of the CDP.

Cemig was selected by CDP as having the best practice in use of an internal carbon price in Latin America – its experience will be transformed into a published case study. This is a pioneer initiative of CDP Latin America, which selected initiatives on three themes – Water resources management; Use of an internal carbon price; and Natural Capital Management– among the 20 companies placed highest in the survey. These experiences were evaluated by an Adjudication Committee of members of CDP’s Technical and Consultative Committee, with representatives of investors, specialists, industry associations, corporate organizations and University.

To access the CDP 2015 Report, use:

http://www.cemig.com.br/en-us/Company_and_Future/Sustainability/Documents/CDP_CEMIG_2015_final_ENG.pdf

In 2015 Cemig published its Greenhouse Gas Emissions Inventory, verified by an independent audit. The complete document can be seen on the Cemig website:

http://www.cemig.com.br/en-us/Company_and_Future/Sustainability/Programs/climate_changes/Documents/CEMIG_GHG_INVENTORY_2014%20ingl%C3%AAs.pdf

EMISSIONS

In 2015 Cemig’s direct emissions totaled 164,537 tCO₂e – and were 1.6% of the Company’s total Greenhouse Gas (GHG) emissions. Scope 1 emissions were lower than in 2014, reflecting the end of the contract to operate the *Ipatinga* Thermal Plant (the contract with *Usiminas* expired in December 2014), and also the shorter time of operation of two other thermal plants: the *Igarapé* operated for 1,502.33 hours in 2015, compared to 6,541.22 hours in 2014; and the *Barreiro* operated for 6,641.62 hours in 2015, compared to 7,794.43 hours in 2014.

This table shows Cemig’s Scope 1 greenhouse gas emission sources:

CEMIG - SCOPE 1 EMISSION SOURCES

EN15	Corporate fleet – fuel consumption
EN16	Aircrafts and small boats consumption
EN17	Emergency generators
EN18	Fuel used in startup and operation of the thermoelectric plant by process gas - <i>Barreiro</i> plant
EN20	Fuel used by <i>Igarapé</i> thermoelectric plant
EN21	Machinery and equipment
EN30	SF6 emissions from electrical equipment
	Fertilizers used in production of seedlings and plantings
	Fuels used by forklifts and cranes

Cemig’s indirect emissions - Scope 2 - in 2015 totaled 809,583 tCO₂e, or 7.6% of the Company’s total emissions. Of this Scope

2 total, 99.3% is attributed to energy losses in the power transmission and distribution systems. Note that Scope 2 is strongly influenced by the emission factor attributed to the national grid, which was 8.19% lower in 2015, at 0.1244 tCO₂e/MWh, compared to 0.1355 tCO₂e/MWh in 2014.

This table shows Cemig's Scope 2 greenhouse gas emission sources:

CEMIG – SCOPE 2 EMISSION SOURCES
Electricity consumption in administrative and operational units
Electricity technical losses in Transmission and Distribution systems

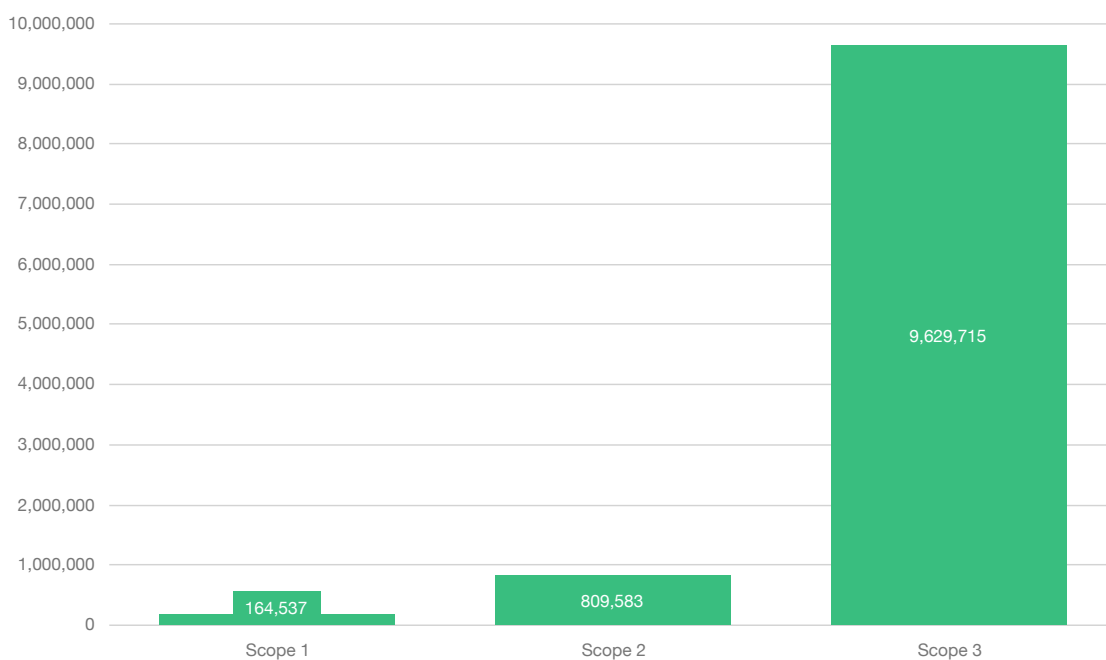
Cemig's main sources of emissions are in Scope 3: emissions that derive from the Company's activities but occur in sources that it neither owns nor controls. The main source of emissions calculated in Scope 3 is electricity consumption by Cemig's end consumers. In 2015, the Company recorded a decrease of 7.5% in total sales, which generated a decrease of 15.1% in indirect emissions in comparison to 2014 – again highlighting the role of the emission factor for the national grid, used to calculate these emissions.

This table shows Cemig's Scope 3 greenhouse gas emission sources:

CEMIG – SCOPE 3 EMISSION SOURCES
Outsourced transport of materials, solid waste and equipment
Air travels
Gasoline, alcohol and diesel used by Distribution contractors
Electricity consumption by final consumers
Outsourced transportation of employees

The chart below presents Cemig's total greenhouse gas emissions in 2015 - direct and indirect.

Total emissions by scope (tCO₂e)



For further information about Cemig's GHG emissions, please see the Emissions Inventory [clicking here](#).

Emissions of sulfur dioxide (SO₂) and nitrogen oxides (NO_x)

SO₂ and NO_x are gases that cause acid rain. The values for SO₂ and NO_x shown in the Total Emissions (t) table include emissions generated by vehicles.

arise

from burning of fuels in the thermoelectric generation plants, and in vehicles. The reductions of 79.1% in SO₂ emissions, and of 87.1% in NO_x emissions, by comparison with 2014, mainly reflect the end of commercial operation of the *Ipatinga* TPP (the contract with *Usiminas* for this plant expired in December 2014) and also the shorter total time of operation on the *Igarapé* and *Barreiro* TPPs in 2015.

TOTAL EMISSIONS (t)*		
YEAR	SO ₂	NO _x
2011	475	109
2012	551	141
2013	963	177
2014	3,049	251
2015	636	32

* The emissions from 2011 to 2014 were recalculated due to the change in emission factors.

Clean Development Mechanism - CDM projects

EN19 Cemig has Clean Development Mechanism (CDM) projects at different stages of analysis for award of Certified Emission Reductions (CERs), involving large and small hydroelectric plants, solar and wind power plants, as follows:

PROJECT	STATUS	ESTIMATE OF ANNUAL REDUCTION OF CO ₂ e (t)	TRACEABILITY
SPC Guanhães, 4 SHPs, 44 MW	Registered	62,949	http://cdm.unfccc.int/Projects/DB/RINA1280831660.48/view
Baguari Hydroelectric Plant, 140 MW	Registered	63,234	http://cdm.unfccc.int/Projects/DB/SGS-UKL1282040767.96/view
Cachoeirão Hydroelectric Plant, 27 MW	Registered	26,400	http://cdm.unfccc.int/Projects/DB/RINA1305214649.79/view
TerraForm Global wind farms (2009), 129 MW	Registered	117,424	http://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1349355823.93/view
Settesolar Solar Plant, 3 MW	Registered	942	http://cdm.unfccc.int/Projects/DB/RWTUV1356098187.07/view
Renova wind farms (2010), 162 MW	Registered	166,924	http://cdm.unfccc.int/Projects/DB/BVQI1350473592.78/view
Pipoca Small Hydroelectric Plant, 20 MW	Registered	17,051	http://cdm.unfccc.int/Projects/DB/RINA1339141027.8/view
Paracambi Small Hydroelectric Plant, 25 MW	Registered	33,993	http://cdm.unfccc.int/Projects/DB/RINA1392324439.94/view
Santo Antônio Hydroelectric Plant, 3,568 MW	Registered	4,015,196	http://cdm.unfccc.int/Projects/DB/PJR%20CDM1356613142.79/view
TerraForm Global wind farms (2009), 164 MW	Being registered	150,801	http://cdm.unfccc.int/Projects/Validation/DB/XMPL2JRB0KUCLA2A31XXO20P0YLASJ/view.h
Renova wind farms (2011), 213 MW	Being registered	215,666	http://cdm.unfccc.int/Projects/Validation/DB/G5GTD3EVZK265RRN4LQK9QF3AK0W5K/view.h

As a result of the efforts made by Cemig in 2015, various segments of society have recognized the excellence of its activities, resulting in several awards, among which we emphasize:

Anefac-Fipecafi-Serasa Award / Transparency Award

The Transparency Award is given to companies that hold transparency practices in the financial information regarding the quality of the management report and consistent with data disclosed, among other factors. In the last 12 years, the company has always received the award, but for the first time, it was also chosen by the judges, as the company with outstanding performance in the category of Publicly Traded Corporation with net revenue up to R\$ 5 billion. (Holding)

Dow Jones Sustainability Index

It is a financial performance index. It was launched in 1999 as the first index of financial performance of the leading companies in sustainability globally. The companies included in this index, indexed to the New York Stock Exchange, are classified as the most capable of creating value for shareholders, in the long term, through the management of risks associated with economic, environmental and social aspects. Cemig is present for the 16th consecutive time. (Holding)

CDP - Carbon Disclosure Project

Cemig has been selected, again, by the Carbon Disclosure Project (CDP) as one of ten Brazilian companies with the best practices in climate change in Latin America. The selection took into account the level of detail and quality of responses with respect to a set of criteria such as management of risks and opportunities of climate change, a commitment to mitigation and reduction efforts of greenhouse gas emissions.

Cemig was also selected by the CDP in Latin America as the best practice of the use of an internal carbon price and will have its experience turned into a case study. (Holding)

“Época/Reclame Aqui Qualidade no Atendimento” Award

Conducted by Revista Época and Reclame Aqui website, the winners are chosen by popular vote on Reclame Aqui’s website. Cemig was winner in the Public Services - Electric Power Category. (Cemig D)

Corporate Sustainability Index - ISE of Bovespa

Promoting a list of companies that extends the understanding about them and groups committed to sustainability, differentiating them in terms of quality, level of commitment to sustainable development, equity, transparency and accountability, nature of the product, in addition to business performance in economic and financial, social and environmental dimensions, and climate change. (Holding)

IASC Award (Aneel Sustainability Index)

Cemig D won the first place in the Southeast Region category - over 400 thousand consumers, competing with eight major utility companies in the region. The IASC annually evaluates the performance provided by these companies in their areas of operation, from interviews with consumers. (Cemig D)

Euronext Vigeo Index - Emerging 70

Euronext Vigeo Index - Emerging 70 elected Cemig as one of the best companies in the emerging market. This index distinguishes companies that have reached the most advanced environmental and social performance, in addition to adopting best practices in corporate governance. (Holding)

Valor 100

Transmissora Aliança de Energia Elétrica S.A. – Taesa, company being part of Cemig Group, was chosen as the Best Company of the Electric Power Sector in Brazil by the “Valor 1000” yearbook, of Valor Econômico newspaper, which analyzed 1,000 companies in 25 sectors of the economy. (Taesa)

CONSOLIDATED SOCIAL STATEMENT

1) BASIS OF CALCULATIONS	2015			2014 RECLASSIFIED		
	AMOUNT (R\$ '000)			AMOUNT (R\$ '000)		
Net revenue (NR)	21,292,211			19,539,578		
Operational profit (OP)	4,119,528			2,139,511		
Gross payroll (GP)	1,258,081			1,098,265		
2) INTERNAL SOCIAL INDICATORS	AMOUNT R\$ '000	% OF GP	% OF NR	AMOUNT R\$ '000	% OF GP	% OF NR
Food	75,115	5.97	0.35	79,436	7.23	0.41
Mandatory charges/costs on payroll	306,272	24.34	1.44	294,767	26.84	1.51
Private pension plan	83,669	6.65	0.39	78,644	7.16	0.40
Health	46,145	3.67	0.22	44,369	4.04	0.23
Safety and medicine in the workplace	23,483	1.87	0.11	21,372	1.95	0.11
Education	896	0.07	-	604	0.05	-
Culture	-	-	-	-	-	-
Training and professional development	35,831	2.85	0.17	37,553	3.42	0.19
Provision of or assistance for day-care centers	2,477	0.20	0.01	2,183	0.20	0.01
Profit sharing	130,198	10.35	0.61	238,664	21.73	1.22
Other	17,112	1.36	0.08	16,657	1.52	0.09
Internal social indicators – Total	721,198	57.33	3.38	814,249	74.14	4.17
3) EXTERNAL SOCIAL INDICATORS	AMOUNT R\$ '000	% OF OP	% OF NR	AMOUNT R\$ '000	% OF OP	% OF NR



Education	455	-	-	287	-	-
Culture	19,035	0.06	0.09	26,816	0.11	0.14
Other donations/subsidies / ASIN project / Sport	54,222	0.17	0.25	66,699	0.27	0.34
Total contributions to society	73,712	0.23	0.34	93,802	0.38	0.48
Taxes (excluding obligatory charges on payroll)	12,017,068	36.59	56.44	6,634,426	26.36	33.95
External social indicators – Total	12,090,780	36.82	56.78	6,728,228	26.74	34.43

4) ENVIRONMENTAL INDICATORS	AMOUNT R\$ '000	% OF OP	% OF NR	AMOUNT R\$ '000	% OF OP	% OF NR
Related to the company's operations	53,84	0.16	0.25	52,838	0.21	0.27
Investments in external programs/projects	-	-	-	-	-	-
Total investment in the environment	53,84	0.16	0.25	52,838	0.21	0.27

What percentage of annual targets to minimize toxic waste and consumption in general during operations, and increase efficacy of use of natural resources, does the company meet:

(X) has no targets
() meets 0–50%

() meets 51–75%
() meets 76–100%

(X) has no targets
() meets 0–50%

() meets 51–75%
() meets 76–100%

5) WORKFORCE INDICATORS	2015	2014	
Number of employees at end of period		7,86	7,922
Number of hirings during period		22	217
Number of outsourced employees		N.A.	N.A.
Number of interns		326	277
Number of employees over 45 years old		3,568	3,596
Number of women employed		1,073	1,087
% of supervisory positions held by women		3.1	12.03
Number of African-Brazilian		2,528	2,546

employees

% of supervisory positions held by black	1.5	14.11
Number of employees with disabilities	-	230

6) CORPORATE CITIZENSHIP	2015		TARGETS FOR 2016			
---------------------------------	-------------	--	-------------------------	--	--	--

Ratio of highest to lowest compensation	36.44	None
---	-------	------

Total number of work accidents to employees	89	0
---	----	---

Who selects the company's social and environmental projects?	<input type="checkbox"/> senior management	<input checked="" type="checkbox"/> senior and functional mgrs.	<input type="checkbox"/> all the employees	<input type="checkbox"/> senior management	<input checked="" type="checkbox"/> senior and functional mgrs.	<input type="checkbox"/> all the employees
--	--	---	--	--	---	--

Who decides the company's work environment health and safety standards?	<input type="checkbox"/> senior and functional mgrs.	<input checked="" type="checkbox"/> all employees	<input type="checkbox"/> All+ Accident Prevention Ctee.	<input type="checkbox"/> senior and functional mgrs.	<input checked="" type="checkbox"/> all employees	<input type="checkbox"/> All+ Accident Prevention Ctee.
---	--	---	---	--	---	---

On labor union freedom, the right to collective bargaining and/or internal employee representation, the company	<input type="checkbox"/> doesn't get involved	<input checked="" type="checkbox"/> follows the ILO guidelines	<input type="checkbox"/> encourages and follows ILO	<input type="checkbox"/> will not get involved	<input checked="" type="checkbox"/> will follow ILO guidelines	<input type="checkbox"/> will encourage and follow ILO
---	---	--	---	--	--	--

The company pension plan covers:	<input type="checkbox"/> senior management	<input type="checkbox"/> senior and functional mgrs.	<input checked="" type="checkbox"/> all employees	<input type="checkbox"/> senior management	<input type="checkbox"/> senior and functional mgrs.	<input checked="" type="checkbox"/> all employees
----------------------------------	--	--	---	--	--	---

The profit-sharing program covers:	<input type="checkbox"/> senior management	<input type="checkbox"/> senior and functional mgrs.	<input checked="" type="checkbox"/> all employees	<input type="checkbox"/> senior management	<input type="checkbox"/> senior and functional mgrs.	<input checked="" type="checkbox"/> all employees
------------------------------------	--	--	---	--	--	---

In selecting suppliers, the company's standards of ethics and social and environmental responsibility:	<input type="checkbox"/> are not considered	<input type="checkbox"/> are suggested	<input checked="" type="checkbox"/> are required	<input type="checkbox"/> will not be considered	<input type="checkbox"/> will be suggested	<input checked="" type="checkbox"/> will be required
--	---	--	--	---	--	--

As to employees' participation in voluntary work programs, the company:	<input type="checkbox"/> doesn't get involved	<input type="checkbox"/> supports	<input checked="" type="checkbox"/> organizes and encourages	<input type="checkbox"/> will not get involved	<input type="checkbox"/> will support	<input checked="" type="checkbox"/> will organize and encourage
---	---	-----------------------------------	--	--	---------------------------------------	---

Total number of consumer complaints and criticisms:	In the company N.A.	Via Procon N.A.	In the courts N.A.	In the company N.A.	Via Procon N.A.	In the courts N.A.
---	------------------------	--------------------	-----------------------	------------------------	--------------------	-----------------------

In the	Via Procon	In the	In the	Via Procon	In the
--------	------------	--------	--------	------------	--------

% of complaints and criticisms met or solved:	company	N.A.	courts	company	N.A.	courts
	N.A.		N.A.	N.A.		N.A.

TOTAL ADDED VALUE DISTRIBUTABLE (R\$ '000)	IN 2015:			IN 2014:		
Distribution of added value (DVA)	61.86% government	8.77% stockholders		50.23% government	12.07% stockholders	
	8.17% employees retained	12.65% others	8.54%	11.94% employees	14.08% others	11.68% retained

7) OTHER INFORMATION

I. In 2015 Cemig invested a total of R\$ 53.8 million in funds related to the environmental: R\$ 8.5 million in research projects related to the environment, and R\$ 45.3 million in environmental management.

II. Another important activity of Cemig is monitoring the water quality of reservoirs, Cemig regularly monitors a network comprising the main river basins in the state of Minas Gerais, with operations in 42 reservoirs and more than 180 stations, collecting physical, chemical and biological data. The monitoring network has been adjusted to improve the support in management of the water quality of the reservoirs and comply with required conditions and state and federal resolutions.

III. In 2015 Cemig dealt with 48,300 tons of unserviceable waste and material: 99.7% was sold, recycled or regenerated; and 0.3% was co-processed, incinerated or disposed of in industrial landfill. Of this total, 32.3 tons of insulating mineral oil previously not appropriate for internal use was regenerated; and 110 tons of oil-impregnated waste was co-processed. Of the total, 658 tons were hazardous wastes, and 47,600 tons non-hazardous wastes.

IV. The sales of these residual materials generated revenue of R\$ 12.8 million – R\$ 10.5 million from sales of materials by Cemig D, and R\$ 2.3 million from sales by Cemig GT.

GRI INDEX

G4-32



Sectoral indicators



GRI INDICATORS	2015 OBSERVATIONS	INFORMATION VERIFIED	IMPACTS	
			INTERNAL	EXTERNAL
G4	Strategy and Analysis			
G4-1	Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	No	x	x

G4-2	Provide a description of key impacts, risks, and opportunities.		Yes	x	x
	Organizational Profile				
G4-3	Report the name of the organization.		Yes	x	x
G4-4	Report the primary brands, products, and services.		Yes	x	x
G4-5	Report the location of the organization's headquarters.		Yes	x	x
G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.		Yes	x	x
G4-7	Report the nature of ownership and legal form.		Yes	x	x
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).		Yes	x	x
G4-9	Report the scale of the organization.		No	x	x
EU1	Installed capacity, broken down by primary energy source and by regulatory regime		No	-	-
EU2	Net energy output broken down by primary energy source and by regulatory regime		No	x	x
EU3	Number of residential, industrial, institutional and commercial customer accounts		No	x	-
	Length of above and underground				

EU4	transmission and distribution lines by regulatory regime		No	x	x
EU5	Allocation of CO2 emissions allowances or equivalent, broken down by Carbon Trading Framework	There was no funding through carbon credit trading.	-	-	-
G4-10	Report the total number of employees and workforce by employment contract, employment type, region and gender.		Yes	x	x
G4-11	Report the percentage of total employees covered by collective bargaining agreements.		Yes	x	-
G4-12	Describe the organization's supply chain.	Internally, Cemig meant by its supply chain operations Generation, Transmission and Distribution. However, it still must be considered other agents that are not part of Cemig Group, such as suppliers of goods and services that act upstream and downstream the supply chain considered by Cemig. All these agents are included in the report.	No	x	x
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.		Yes	x	x
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization.		Yes	x	x
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.		Yes	x	x
	List memberships of associations (such as industry associations)				

G4-16	and national or international advocacy organizations in which the organization: Holds a position on the governance body; Participates in projects or committees; Provides substantive funding beyond routine membership dues; Views membership as strategic	Yes	x	x
-------	---	-----	---	---

	Identified Material Aspects and Boundaries			
--	--	--	--	--

G4-17	List all entities included in the organization's consolidated financial statements or equivalent documents; Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	Yes	x	x
-------	--	-----	---	---

G4-18	Explain the process for defining the report content and the Aspect Boundaries; Explain how the organization has implemented the Reporting Principles for Defining Report Content.	Yes	x	x
-------	---	-----	---	---

G4-19	List all the material Aspects identified in the process for defining report content.	Yes	x	x
-------	--	-----	---	---

G4-20	For each material aspect, report your Aspect Limit within the organization.	Yes	x	x
-------	---	-----	---	---

G4-21	For each material aspect, report your Aspect Limit without the organization.	Yes	x	x
-------	--	-----	---	---

G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	Yes	x	-
-------	---	-----	---	---

	Report significant			
--	--------------------	--	--	--

G4-23	changes from previous reporting periods in the Scope and Aspect Boundaries.	Yes	x	-
Stakeholder Engagement				
G4-24	Provide a list of stakeholder groups engaged by the organization.	Yes	x	-
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.	Yes	x	-
G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	Yes	x	-
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	Yes	x	x
Report Profile				
G4-28	Reporting period (such as fiscal or calendar year) for information provided.	Yes	-	-
G4-29	Date of most recent previous report (if any).	Yes	-	-
G4-30	Reporting cycle (such as annual, biennial).	Yes	-	-
G4-	Provide the contact point for questions regarding	No	-	x

G4-32	Report the 'in accordance' option the organization has chosen; Report the GRI Content Index for the chosen option; Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines.	Yes	x	x
G4-33	Report the organization's policy and current practice with regard to seeking external assurance for the report	Yes	x	x
	Governance			
G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	No	x	x
G4-35	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	No	x	-
G4-37	Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body.	No	x	x
	Report whether the Chair of the highest			

G4-39	governance body is also an executive officer (and, if so, his or her function within the organization's management and the reasons for this arrangement).	This does not apply to Cemig's governance model.	-	-	-
G4-40	Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members.		No	x	x
G4-41	Report processes for the highest governance body to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders.		No	x	x
G4-47	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities.		Yes	x	-
G4-51	Report the remuneration policies for the highest governance body and senior executives for the below types of remuneration Report how performance criteria in the remuneration policy relate to the highest governance body's and senior executives' economic, environmental and social objectives.		No	x	-
Ethics and Integrity					
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.		Yes	x	x
	Report the internal and				

G4-57	external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity (e.g., ombudsman).		Yes	x	x
-------	---	--	-----	---	---

G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.		Yes	x	x
-------	--	--	-----	---	---

	Management approach and performance indicators				
	Economic Performance				
	Electric utilities sector-specific disclosures on management approach				
	Availability and Reliability				
EU6	Planning to ensure short and long-term electricity availability and reliability (Information)		No	x	x
	Aspect: Demand-side management (DSM)				
EU7	Demand-side management programs including residential, commercial and industrial programs (Information)		Yes	x	x
	Aspect: Research and Development				
EU8	Research and development activity, and expenditure aimed at providing reliable electricity and promoting sustainable development. (Information)		Yes	x	x
	Aspect: Decommissioning of				

	plants				
EU9	Provisions for decommissioning of nuclear power plants (Information)	Not applicable.	-	-	-
	Economic Performance Indicators				
	Aspect: Availability and Reliability				
EU10	Planned capacity against projected electricity demand over the long-term, broken down by energy source and regulatory regime		No	x	x
	Aspect: System Efficiency				
EU11	Average generation efficiency of thermal plants by energy source and by regulatory regime.		No	x	x
EU12	Transmission and distribution losses as a percentage of total energy		No	x	x
	Economic Performance				
	Aspect: Economic Performance				
EC1	Direct economic value generated and distributed		No	x	x
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.		Yes	x	x
EC3	Coverage of the organization's defined benefit plan obligations.		Yes	x	-
EC4	Financial assistance received from government		Yes	x	x
	Aspect: Market Presence				

Ratios of standard entry

EC5	level wage by gender compared to local minimum wage at significant locations of operation		Yes	x	-
EC6	Proportion of senior management hired from the local community at significant locations of operation	Cemig has no specific standard for hiring local employees. As it is a mixed capital company, contracting can only be accomplished through public tender.	-	-	-
	Aspect: Indirect Economic Impacts				
EC7	Development and impact of infrastructure investments and services supported		No	x	x
	Aspect: Purchasing Processes				
EC9	Proportion of spending on local suppliers at significant locations of operation		No	-	x
	Environmental Performance				
	Environmental Performance Indicators				
	Aspect: Materials				
	Materials used by weight or volume.				
EN1	Note about this indicator: Report in-use inventory of solid and liquid, high level and low level PCBs in equipment.		No	x	x
EN2	Percentage of materials used that are recycled input materials.		No	x	x
	Aspect: Energy				
EN3	Energy consumption within the organization.		Yes, In the independent verification of the GHG inventory.	x	-
EN5	Energy impact	The energy intensity for the product in 2015 was	-	x	x

EN6	Reductions in energy consumption		No	x	x
EN7	Reductions in energy consumption demands for products and services		No	x	x
	Aspect: Water				
	Total water withdrawal by source				
EN8	Note about this indicator: Report total amount of water used for processing, cooling and consumption in thermonuclear plants, including the use of water in ash handling.		Yes	x	x
EN9	Water sources significantly affected by withdrawal of water.		Yes	-	x
EN10	Percentage and total volume of water recycled and reused.	The amount of water recycled or reused by Cemig is insignificant.	Yes	x	x
	Aspect: Biodiversity				
EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		Yes	x	x
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas Note about this indicator: Include: Maintenance of transmission line corridors; fragmentation and insulation, and impacts of thermal disposal.		Yes	x	x
EU13	Biodiversity of offset habitats compared to the biodiversity of the		Yes	x	x

	affected areas.				
EN13	Habitat protected or restored		Yes	x	x
	Aspect: Emissions				
	Direct greenhouse gas (GHG) emissions (Scope 1)				
EN15	<p>Note about this indicator: Report CO2 emissions per MW/h by country or regulatory regime, for: Net generation from total generating capacity; Net generation from total fossil fuel generation; Net delivery estimate for end users. Include emissions from own generation, as well as gross purchased energy, including line losses.</p>		Yes, In the independent verification of the GHG inventory.	x	x
	Energy indirect greenhouse gas (GHG) emissions (Scope 2).				
EN16	<p>Note about this indicator: Report CO2 emissions per MW/h by country or regulatory regime, for: Net generation from total generating capacity; Net generation from total fossil fuel generation; Net delivery estimate for end users. Include emissions from own generation, as well as gross purchased energy, including line losses.</p>		Yes, In the independent verification of the GHG inventory.	x	x
EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3).		Yes, In the independent verification of the GHG inventory.	x	x
EN18	Greenhouse gas (GHG) emissions intensity		Yes, In the independent verification of the GHG inventory.	x	x
EN19	Reduction of greenhouse gas (GHG) emissions		No	x	x

EN20	Emissions of ozone-depleting substances (ODS)	Information not available.	Yes, In the independent verification of the GHG inventory.	x	x
EN21	NO, SO, and other significant air emissions by type and weight. Note about this indicator: Report emissions per MWh net generation.		Yes, In the independent verification of the GHG inventory.	x	x
Aspect: Effluents and Waste					
EN22	Total water discharge by quality and destination Note about this indicator: include thermal discharge		Yes	-	x
EN23	Total weight of waste by type and disposal method. Note about this indicator: Include PCB waste. Report on nuclear waste using IAEA definitions and protocols. Report mass and activity of spent nuclear fuel sent for processing and reprocessing per year. In addition, report radioactive waste produced per net MWh nuclear generation per year. Report (in terms of mass and activity) low/intermediate level waste and high level waste separately, based on IAEA radioactive waste classification. This should also include waste produced from reprocessing activities, where data is available.		Yes, In the independent verification of the GHG inventory.	x	x
EN24	Total number and volume of significant spills Weight of transported, imported, exported, or treated waste deemed	In 2015 there were no significant spills.	No	x	x

EN25	hazardous under the terms of the Basel Convention ² Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	Cemig does not engage in the international transport of waste.	-	-	-
EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.		Yes	x	x
Aspect: Products and Services					
EN27	Extent of impact mitigation of environmental impacts of products and services	Cemig believes that the impacts are not significant. The relevant existing projects are related to biodiversity and have been reported in the indicator EN12.	-	-	x
EN28	Percentage of products sold and their packaging materials that are reclaimed by category.	The Company's main product is electricity, which due to its nature does not require packaging.	-	-	-
Aspect: Conformity					
EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		No	x	-
Aspect: Transportation					
EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce		Yes, In the independent verification of the GHG inventory.	x	x
Aspect: General					
EN31	Total environmental protection expenditures and investments by type.		No	x	-

	Aspect: Environmental Assessment of Suppliers				
EN32	Percentage of new suppliers that were screened using environmental criteria.		No	-	x
EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken.		No	-	x
	Aspect: Environmental Grievance Mechanisms				
EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms		No	x	x
	Social Performance				
	Performance Indicators Related to Labor Practices and Decent Work				
	Aspect: Employment				
EU14	Programs and processes to ensure the availability of a skilled workforce.		Yes	x	-
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region.		Yes	x	-
EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors.		Yes	x	x
LA1	Total number and rate of employee turnover by age group, gender, and region. Note about this indicator: For the employees who left their employment during the reporting		Yes	x	-

period, report the average time in the job, by gender and age group.

LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.		Yes	x	-
LA3	Return to work and retention rates after parental leave, by gender	In 2015, maternity leave was granted to 39 women, of whom 8 began 2016 on maternity leave. All returned to work following the conclusion of their leave. None of them left the Company. Upon examination 12 months after return from leave, there was a 100% retention rate. Among men, in 2015, 139 had the right to paternity leave. Of these only 2 left the Company. The percentage still with the company 12 months after their paternity leave was 98.6%.	No	x	-
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training.		Yes	x	-
Aspect: Labor Relations					
LA4	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.		Yes	x	-
Aspect: Workplace Health and Safety					
LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs		Yes	x	-
LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total		Yes	x	-

number of workrelated fatalities, by region and by gender

LA7	Workers with high incidence or high risk of diseases related to their occupation	According to Occupational Medicine, Cemig's employees are subject predominantly to the risk of accidents and in some activities there are risks of occupational diseases, which the Health and Safety units work to minimize.	No	x	-
-----	--	---	----	---	---

LA8	Health and safety topics covered in formal agreements with trade unions		Yes	x	-
-----	---	--	-----	---	---

	Aspect: Training and Education				
--	--------------------------------	--	--	--	--

LA9	Average hours of training per year per employee by gender, and by employee category.		Yes	x	-
-----	--	--	-----	---	---

LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.		Yes	x	-
------	--	--	-----	---	---

LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category.		Yes	x	-
------	---	--	-----	---	---

	Aspect: Diversity and Equal Opportunities				
--	---	--	--	--	--

LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity		Yes	x	-
------	--	--	-----	---	---

	Aspect: Equal Remuneration for Men and Women				
--	--	--	--	--	--

Ratio of basic salary and

LA13	remuneration of women to men by employee category, by significant locations of operation		Yes	x	-
	Aspect: Evaluation of Suppliers' Labor Practices				
LA14	Percentage of new suppliers that were screened using labor practices criteria		No	x	x
LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken.		No	x	x
	Human Rights Performance Indicators				
	Aspect: Investments				
HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening.		No	-	-
HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.		Yes	x	-
	Aspect: Anti-Discrimination				
HR3	Total number of incidents of discrimination and corrective actions taken.		Yes	x	-
	Aspect: Freedom of association and collective bargaining				
HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may		Yes	x	x

be violated or at significant risk, and measures taken to support these rights.

	Aspect: Child Labor				
HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.		No	x	x
	Aspect: Forced or Compulsory Labor				
HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.		No	x	x
	Aspect: Safety Practices				
HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations		No	x	-
	Aspect: Human Right Evaluation of Suppliers				
HR10	Percentage of new suppliers that were screened using human rights criteria.		No	x	x
HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken.		No	x	x
	Aspect: Human Rights Grievance Mechanisms				
HR12	Number of grievances about human rights impacts filed, addressed, and resolved through		No	x	x

formal grievance mechanisms

	Company's Social Performance Indicators				
	Aspect: Emergency and disaster prevention and preparedness				
EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans.		Yes	x	x
	Aspect: Community				
S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs.		Yes	x	x
EU22	Number of people physically or economically displaced and compensation, broken down by type of project.		Yes	x	x
	Aspect: Combatting Corruption				
S03	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified.		Yes	x	x
S04	Communication and training on anti-corruption policies and procedures.		Yes	x	x
S05	Confirmed incidents of corruption and actions taken.		Yes	x	x
	Aspect: Public Policy				
S06	Total value of political contributions by country and recipient/beneficiary.	Being a public-sector/private-sector ('mixed stockholding') company, Cemig cannot and does not make financial contributions to politicians,	No	-	-

parties or related institutions.

	Aspect: Unfair Competition				
S07	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	The Company was not prosecuted, nor were any administrative proceedings brought against, it for violations of the competitive order (neither for practices of trust, monopoly or unfair competition). All of Cemig's acquisitions, prior to taking effect, must be approved by the Administrative Council for Economic Defense (CADE), an authority linked to the Brazilian Ministry of Justice.	No	x	-
	Product liability indicators				
	Aspect: Client Health and Safety				
PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement.		No	x	-
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes.	There were no non-compliance cases related to this aspect.	No	x	x
EU25	Number of injuries and fatalities to the public involving company assets including legal judgments, settlements and pending legal cases of diseases.		No	x	x
	Aspect: Labelling of Products and Services				
PR3	Type of product and service information required by the organization's procedures for product and service information		No	-	x

and labeling, and percentage of significant products and service categories subject to such information requirements.

PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.		No	-	x
PR5	Results of surveys measuring customer satisfaction.		Yes	x	x
	Aspect: Marketing Communications				
PR6	Sale of banned or disputed products.	Not applicable.	-	-	-
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.		No	x	x
	Aspect: Client Privacy				
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.		Yes	x	x
	Aspect: Conformity				

Cemig was cited four times by Aneel in 2015, generating fines totaling R\$ 3,797,447.83. Cemig carries out continuous monitoring, with annual targets for the reduction of fines received, through specific internal processes and controls, which are focused directly on an effort to reduce initial amounts levied. In 2015 there was an administrative level decision on

PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	four fines, which related to three infringement notices issued by Aneel in 2014 and one in 2015. The value of these 4 fines, for 2015, based on the decisions of the previous years, was R\$ 3,791,341.52. After the decisions of this year, this amount was changed to R\$ 2,349,190.58, a reduction of 38.0%. This outcome, associated with the number of fines reduced, resulted in a Regulatory Fines Reduction Index (IRMR) of 57.06% - higher than the target of 43.37% that had been set for 2015. The target is set to take account of the accumulated effective outcome of the indicator in the last five years.	No	x	-
-----	---	---	----	---	---

	Aspect: Conformity				
EU26	Percentage of population unserved in licensed distribution or service areas.		-	x	x
EU27	Number of residential disconnections for non-payment.		No	x	x
EU28	Power outage frequency.		Yes	x	x
EU29	Average power outage duration.		Yes	x	x
EU30	Average plant availability factor by energy source and by regulatory regime.		No	x	x

GLOBAL COMPACT PRINCIPLES

Human Rights

GC1 Principle 1 : Businesses should support and respect the protection of internationally proclaimed human rights;

GC2 Principle 2: Make sure that they are not complicit in human rights abuses.

Labour

GC3 Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

GC4 Principle 4: The elimination of all forms of forced and compulsory labour;

GC5 Principle 5: The effective abolition of child labour; and

GC6 Principle 6: The elimination of discrimination in respect of employment and occupation.

Environment

GC7 Principle 7: Businesses should support a precautionary approach to environmental challenges;

GC8 Principle 8: Undertake initiatives to promote greater environmental responsibility; and

GC9 Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

GC10 Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

INDEPENDENT VERIFICATION STATEMENT

SGS ICS CERTIFICADORA LTDA, (SGS) STATEMENT OF SUSTAINABILITY ACTIVITIES IN “ANNUAL SUSTAINABILITY REPORT 2015” OF CEMIG.

ASSURANCE NATURE AND SCOPE

SGS was hired by Companhia Energética de Minas Gerais - CEMIG to undertake the Annual Sustainability Report 2015 (RS2015) in independent manner. The assurance scope, based on assurance methodology of SGS' Sustainability Report, includes texting and data for 2015 provided therein.

The responsibility for the information of “ANNUAL SUSTAINABILITY REPORT 2015” of CEMIG and its presentation lies on company's board of directors and management. SGS has not taken part in preparation of any material provided in “ANNUAL SUSTAINABILITY REPORT 2015”. Our responsibility is to give our opinion regarding the text, data, charts and statement within the assurance scope, which will be detailed later in order to communicate CEMIG stakeholders.

The SGS Group has developed a set of Sustainability Assurance Communication protocols based on actual improvements provided in Global Reporting Initiative (GRI) guide and the assurance standard ISAE3000. These protocols are different options of assurance level, depending on context and capability of Claimant Organization.

This report was assured through our protocols to assess content legitimacy and its alignment to Sustainability Report Preparation Guide (G4 2013), and it has demonstrated a reasonable level. The assurance has covered a combination of previous investigation, interviews with strategic employees, review of documents, records and data and assessment of report for alignment with GRI protocols. The CEMIG's accounting information and/or referred to “ANNUAL SUSTAINABILITY REPORT 2015” were not assessed as integrating part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group is worldwide leading organization in inspections, analysis and verifications, operating in more than 140 countries and service provision, including management system certification, audit and capacitation in quality, environmental, social and ethic areas, assurance of sustainability report and verification of greenhouse gases (GHG). SGS reinforces its independence from CEMIG, being exempt from interest conflict with organization, its subsidiaries and stakeholders.

The assurance team was made based on members' knowledge, expertise and qualification to this service; it was composed of:

- A Lead Auditor for Sustainability Assurance Report, Lead Assessor of Greenhouse Gases (GHG), Lead Auditor for Business Ethics and Integrity, Lead Auditor registered with IRCA (*International Register of Certificated Auditors*) for Environmental, Quality, Occupational Health and Safety and Social Management System.
- An Auditor for Sustainability Report, Lead Assessor of Greenhouse Gases (GHG) and Climate Changes program, lead Auditor for Socio-environmental programs, Lead Auditor for Environmental, Quality, Energy, Health and Safety Management System.
- An Auditor for Sustainability Report Assurance, lead Assessor of Greenhouse Gases (GHG) and climate change programs, Socio-Environmental Lead Auditor.

ASSURANCE OPINION

Regarding the methodology provided and verification performed, we are satisfied with the information and data provided in assessed “ANNUAL SUSTAINABILITY REPORT 2015” are reliable and a fair and balanced representation of CEMIG sustainability activities in 2015. The assurance team has the opinion that the report can be used by CEMIG stakeholders. We believe that the organization has chosen the assurance level suitable to its needs.

In our opinion, the report content meets the requirements of GRI G4, including certain indicators of Specific Supply for the Electric Segment G4 as Essential Option and Global Compact Principles.

RECOMMENDATIONS, FINDINGS AND CONCLUSIONS OF GLOBAL GUIDELINES OF GLOBAL REPORTING INITIATIVE GRI G4

The CEMIG Report, "ANNUAL SUSTAINABILITY REPORT 2015", is properly aligned with GRI G4, Essential Option. The material aspects and limits inside and outside the organization were properly defined in accordance with GRI Reporting Principles. The material aspects claims and the identified limits and commitment to stakeholders, G4-17 to G4-27, are described correctly in reference list and report.

By keeping the use of GRI G4, CEMIG kept its leading position in sustainability reports. Equally, it reports to CDP (Carbon Disclosure Project) in a voluntary manner since 2007, and its GHG inventory is checked by an independent third party. This information was used in a GRI report.

A SGS congratulates CEMIG for its commitment to education, through the creation of e-courses, as well as collaboration with Universities for research and internship programs at CEMIG's facilities and projects. CEMIG has been constantly contributing to people and institutions with donations, sponsorship and philanthropy.

During the site visits, it was found that CEMIG has strategic alliances with foundation and universities to implement effectively its environmental projects, such as nurseries for reforestation and "Programa Peixe Vivo".

CEMIG encourages an ethical behavior to its management based on its "Ethical Practices Statement and Professional Code of Conduct". It has an internal corporate audit team, as well as a Risk Management area and an information security team. It was observed that it adopts solid methods for assessing operational, financial and environmental risks.

Some opportunities to improve were found during the assurance process 2015 to be considered in coming reports, such as:

- To consider periodic assessments of professional evolution and development in the performance evaluation process.
- CEMIG should enhance its occupational health and safety programs for the employees and subcontractors, once in 2015 the number of accidents, diseases and deaths increased.
- To adopt an international acknowledged methodology or standard to assess water-related risks, and to make a hydric assessment and quantify its water footprint. To do so, the water catchment should be considered.
- The percentage of communities or centers where development projects were implemented is not specified. The social impacts should be measured, as well as amount of families, people and communities benefited.
- It is recommendable to identify the social risks, such as potential social conflicts, political instability, Government Company and Institutions image etc.
- For coming reports, CEMIG should include information of business in which it holds shares.

Executed by and on behalf of SGS



Ursula Antúnez de Mayolo Corzo
Lead Auditor – Sustainability Report
SGS ICS Certificadora Ltda.
April 22nd, 2016
www.sgs.com

GP5008 Issue 4

[Click here](#) to access the statement in PDF format.

Cemig Corporate Communication Management (CE)

Cemig Investor Relations Management (RI)

Cemig Corporate Sustainability Management (SE)

Graphic design

Perfil 252

Consultancy in planning, data collection, analysis of indicators and drafting

KeyAssociados

Photographs

Cemig Collection

Stock photos – iStockphoto e Shutterstock

Elderth Theza

Eugênio Paccelli

Click Fotografia

Translation

Stephen B. Fry

Corporate Information

Companhia Energética de Minas Gerais – Cemig

Avenida Barbacena 1,200

30190-131 Belo Horizonte, MG, Brazil

CNPJ: 17.155.730/0001/64

Tel: 116 – or 0800 7210 116

www.cemig.com.br

Cemig Distribuição S.A.

Avenida Barbacena 1,200 – 17th Floor – A1 Wing

30190-131 Belo Horizonte, MG, Brazil

CNPJ: 06.981.180/0001-16

Cemig Geração e Transmissão S.A.

Avenida Barbacena 1,200 – 12th Floor – B1 Wing

30190-131 Belo Horizonte, MG, Brazil

Custodian Bank

Banco Itaú S.A.

ADR Depositary Bank

Citibank Shareholder Services