



Carbon Disclosure Project 07

2009

Profile: Companhia Energética de Minas Gerais – Cemig

Cemig – The Best Energy in Brazil

The Companhia Energética de Minas Gerais – Cemig is a group that is active in the generation, transmission and distribution of electricity and is comprised of 49 companies and 10 consortia, with assets and business activities in different states throughout Brazil. Control of the companies and consortia is exercised by a holding company, which is listed on stock exchanges in Brazil, the U.S.A. and Spain.

Cemig's main activities are concentrated in its whole subsidiaries – Cemig Distribuição S.A. and Cemig Geração e Transmissão S.A. In addition, Cemig owns shares in energy distribution utilities (Light) and in electricity transmission companies and even has investments in natural gas transmission (Gasmig) and data transmission (Infovias). The Company is currently building, through a consortium, the Santo Antônio Hydroelectric Plant at the Rio Madeira complex, which is located in Rondônia, and two sections of a transmission line between the Charrúa and Nueva Temuco substations, both located in Chile.

Cemig Distribuição S.A. – Cemig D – is the largest electricity distribution utility in Brazil in terms of energy transported and network extension, as well as in the number of consumers. It operates in 805 municipalities and 5,415 locations in Minas Gerais, servicing approximately 18 million people. Its concession area covers approximately 578.4 square kilometers, which is larger than the area of France.

Cemig Geração e Transmissão S.A. – Cemig GT – is one of the largest electricity generation and transmission utilities in Brazil and is the main energy utility in the State of Minas Gerais. Cemig and its controlled companies own 63 plants, with 58 being hydroelectric, four thermoelectric and one wind power, with a total installed capacity of 6,691 MW.

Summary

Profile: Companhia Energética de Minas Gerais – Cemig 1

Theme: 1. Regulatory Risks:..... 9

Question: 1.1. Is your company exposed to regulatory risks related to climate change? 9

Theme: 2. Physical Risks:..... 10

Question: 2.1. Is your company exposed to physical risks from climate change?10

Theme: 3. Other Risks:..... 13

Question: 3.1. Is your company exposed to other risks as a result of climate change? 13

Theme: 4. Regulatory Opportunities: 14

Question: 4.1. Do regulatory requirements on climate change present opportunities for your company? 14

Theme: 5. Physical Opportunities: 16

Question: 5.1. Do physical changes resulting from climate change present opportunities for your company? 16

Theme: 6. Other Opportunities: 17

Question: 6.1. Does climate change present other opportunities for your company?..... 17

Theme: 7. Reporting Year: 21

Question: 7.1. Please state the start date and end date of the year for which you are reporting GHG emissions. 21

Theme: 8. Reporting Boundary:..... 22

Question: 8.1. Please indicate the category that describes the company, entities, or group for which Scope 1 and Scope 2 GHG emissions are reported. 22

Question: 8.2. Please state whether any parts of your business or sources of GHG emissions are excluded from your reporting boundary...... 23

Theme: 9. Methodology:..... 24

Question: 9.1. Please describe the process used by your company to calculate Scope 1 and Scope 2 GHG emissions including the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 GHG emissions...... 24

Question: 9.2. Details of any assumptions made. 25

Question: 9.3. The names of and links to any calculation tools used...... 25

Question: 9.4. The global warming potentials you have applied and their origin. 25

Question: 9.5. The emission factors you have applied and their origin...... 26

Theme: 10. Scope 1 Direct GHG Emissions:..... 27

Question: 10.1. Total gross global Scope 1 GHG emissions in metric tonnes of CO ₂ -e.....	27
Question: 10.2. Country or region	28
Question: 10.3. Business division	28
Question: 10.4. Facility.....	28
Question: 10.5. Please break down your total global Scope 1 GHG emissions in metric tonnes of the gas and metric tonnes of CO ₂ -e by GHG type.....	28
Question: 10.6. If you have not provided any information about Scope 1 emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 1 GHG emissions information in future.....	28
Theme: 11. Scope 2 Indirect GHG Emissions:.....	29
Question: 11.1. Total gross global Scope 2 GHG emissions in metric tonnes of CO ₂ -e.....	29
Question: 11.2. Country or region	29
Question: 11.3. Business division	29
Question: 11.4. Facility.....	29
Question: 11.5. If you have not provided any information about Scope 2 emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 2 GHG emissions information in future.....	29
Theme: 12. Contractual Arrangements Supporting Particular Types of Electricity Generation:	30
Question: 12.1. If you consider that the grid average factor used to report Scope 2 emissions in question 11 above does not reflect the contractual arrangements you have with electricity suppliers, (for example, because you purchase electricity using a zero or low carbon electricity tariff), you may calculate and report a contractual Scope 2 figure in response to this question, showing the origin of the alternative emission factors and information about the tariff.....	30
Question: 12.2. If you retire any certificates (eg: Renewable Energy Certificates) associated with zero or low carbon electricity, please provide details.....	30
Theme: 13. Scope 3 Other Indirect GHG Emissions:	31
Question: 13.1. Employee business travel.....	31
Question: 13.2. External distribution/logistics.....	31
Question: 13.3. Use/disposal of company's products and services	31
Question: 13.4. Company supply chain.....	31
Question: 13.5. Other.....	31
Question: 13.6. If you have not provided information about one or more of the categories of Scope 3 GHG emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 3 indirect emissions information in future.....	31
Theme: 14. Emissions Avoided Through use of Goods and Services:.....	32

Question: 14.1. If your goods and/or services enable GHG emissions to be avoided by a third party, please provide details including the estimated avoided emissions, the anticipated timescale over which the emissions are avoided and the methodology, assumptions, emission factors (including sources), and global warming potentials (including sources) used for your estimations.....	32
Theme: 15. Carbon Dioxide Emissions from Biologically Sequestered Carbon:.....	35
Question: 15.1. Please provide the total global carbon dioxide emissions in metric tonnes CO ₂ from biologically sequestered carbon.....	35
Theme: 16. Emissions Intensity:.....	36
Question: 16.1. Please supply a financial emissions intensity measurement for the reporting year for your combined Scope 1 and 2 emissions, including a description of the measurement.....	36
Question: 16.1.1. The units	36
Question: 16.1.2. The resulting figure.....	36
Question: 16.2. Please supply an activity related intensity measurement for the reporting year for your combined Scope 1 and 2 emissions, including a description of the measurement.....	36
Question: 16.2.1. The units	36
Question: 16.2.2. The resulting figure.....	36
Theme: 17. Emissions History:.....	37
Question: 17.1. Do emissions for the reporting year vary significantly compared to previous years?	37
Question: 17.1.1. Estimate the percentage by which emissions vary compared with the previous reporting year.....	37
Theme: 18. External Verification/Assurance:.....	38
Question: 18.1. Has any of the information reported in response to questions 10 – 15 been externally verified/assured in whole or in part?	38
Question: 18.2. State the scope/boundary of emissions included within the verification/assurance exercise.....	38
Question: 18.3. State what level of assurance, (eg: reasonable or limited) has been given.....	38
Question: 18.4. Provide a copy of the verification/assurance statement.....	38
Question: 18.5. Specify the standard against which the information has been verified/assured.....	38
Question: 18.6. If not, please state whether you have plans for GHG emissions accounting information to be externally verified/assured in future.....	38
Theme: 19. Data Accuracy:	39
Question: 19.1. What are the main sources of uncertainty in your data gathering, handling and calculations e.g.: data gaps, assumptions, extrapolation, metering/measurement inaccuracies etc?	39
Question: 19.2. How do these uncertainties affect the accuracy of the reported data in percentage terms or an estimated standard deviation?	39

Question: 19.3. Does your company report GHG emissions under any mandatory or voluntary scheme (other than CDP) that requires an accuracy assessment? ..	39
<i>Question: 19.3.1. The name of the scheme.....</i>	<i>39</i>
<i>Question: 19.3.2. The accuracy assessment for GHG emissions reported under that scheme for the last report delivered.</i>	<i>39</i>
Theme: 20. Energy and Fuel Requirements and Costs:.....	40
Question: 20.1. The total cost of electricity, heat, steam and cooling purchased by your company.	40
<i>Question: 20.1.1. Please break down the costs by individual energy type.....</i>	<i>40</i>
Question: 20.2. The total cost of fuel purchased by your company for mobile and stationary combustion.....	40
<i>Question: 20.2.1. Please break down the costs by individual fuel type.</i>	<i>40</i>
Question: 20.3. Your company's total consumption of purchased energy in MWh.	40
Question: 20.4. Your company's total consumption in MWh of fuels for stationary combustion only. This includes purchased fuels, as well as biomass and self-produced fuels where relevant.	40
<i>Question: 20.4.1. Please break down the total consumption of fuels reported in answer to question 20.4 by individual fuel type in MWh.....</i>	<i>41</i>
Question: 20.5. What is the total amount of energy generated in MWh from the fuels reported in question 20.4?	41
Question: 20.6. What is the total amount in MWh of renewable energy, excluding biomass, that is self-generated by your company?	41
Question: 20.7. What percentage of the energy reported in response to question 20.5 is exported/sold by your company to the grid or to third parties?.....	41
Question: 20.8. What percentage of the renewable energy reported in response to question 20.6 is exported/sold by your company to the grid or to third parties? .	41
Theme: 21. EU Emissions Trading Scheme:.....	42
Question: 21.1 Does your company operate or have ownership of facilities covered by the EU Emissions Trading Scheme (EU ETS)?	42
Question: 21.2. The allowances allocated for free for each year of Phase II for facilities which you operate or own. (Even if you do not wholly own facilities, please give the full number of allowances).....	42
Question: 21.3. The total allowances purchased through national auctioning processes for the period 1 January 2008 to 31 December 2008 for facilities that you operate or own. (Even if you do not wholly own facilities, please give the total allowances purchased through auctions by the facilities for this period).....	42
Question: 21.4. The total CO₂ emissions for 1 January 2008 to 31 December 2008 for facilities which you operate or own. (Even if you do not wholly own facilities, please give the total emissions for this period.).....	42
Theme: 22. Emissions Trading:	43

Question: 22.1. Please provide details of any emissions trading schemes, other than the EU ETS, in which your company already participates or is likely to participate within the next two years.....	43
Question: 22.2. What is your overall strategy for complying with any schemes in which you are required or have elected to participate, including the EU ETS?	43
Question: 22.3. Have you purchased any project-based carbon credits?	43
Question: 22.4. Provide details including the type of unit, volume and vintage purchased and the standard/scheme against which the credits have been verified, issued and retired (where applicable).	44
Question: 22.5. Have you been involved in the origination of project-based carbon credits?.....	44
Question: 22.6. Please provide details including:	44
Question: 22.7. Are you involved in the trading of allowances under the EU ETS and/or project-based carbon credits as a separate business activity, or in direct support of a business activity such as investment fund management or the provision of offsetting services?	45
Question: 22.8. Please provide details of the role performed.....	45
Theme: 23. Reduction Plans:	46
Question: 23.1. Does your company have a GHG emissions and/or energy reduction plan in place?	46
Question: 23.2. Please explain why.	46
Question: 23.3. Do you have an emissions and/or energy reduction target(s)? ...	46
Question: 23.4. What is the baseline year for the target(s)?	46
Question: 23.5. What is the emissions and/or energy reduction target(s)?.....	46
Question: 23.6. What are the sources or activities to which the target(s) applies?	46
Question: 23.7. Over what period/timescale does the target(s) extend?	47
Question: 23.8. What activities are you undertaking or planning to undertake to reduce your emissions/energy use?	47
Question: 23.9. What benchmarks or key performance indicators do you use to assess progress against the emissions/energy reduction goals you have set? ..	47
Question: 23.10. What emissions reductions, energy savings and associated cost savings have been achieved to date as a result of the plan and/or the activities described above? Please state the methodology and data sources you have used for calculating these reductions and savings.....	47
Question: 23.11. What investment has been required to achieve the emissions reductions and energy savings targets or to carry out the activities listed in response to question 23.8 above and over what period was that investment made?	47
Question: 23.12. What investment will be required to achieve the future targets set out in your reduction plan or to carry out the activities listed in response to	

question 23.8 above and over what period do you expect payback of that investment?.....	48
Question: 23.13. Please estimate your company’s future Scope 1 and Scope 2 emissions for the next five years for each of the main territories or regions in which you operate or provide a qualitative explanation for expected changes that could impact future GHG emissions.	48
Question: 23.14. Please estimate your company’s future energy use for the next five years for each of the main territories or regions in which you operate or provide a qualitative explanation for expected changes that could impact future GHG emissions.	48
Question: 23.15. Please explain the methodology used for your estimations and any assumptions made.	49
Theme: 24. Planning:	50
Question: 24.1. How do you factor the cost of future emissions into capital expenditures and what impact have those estimated costs had on your investment decisions?	50
Theme: 25. Responsibility:	51
Question: 25.1. Does a Board Committee or other executive body have overall responsibility for climate change?	51
Question: 25.2. Please state how overall responsibility for climate change is managed and indicate the highest level within your company with responsibility for climate change.	51
Question: 25.3. Which Board Committee or executive body has overall responsibility for climate change?	51
Question: 25.4. What is the mechanism by which the Board or other executive body reviews the company’s progress and status regarding climate change?	51
Theme: 26. Individual Performance:	53
Question: 26.1. Do you provide incentives for individual management of climate change issues including attainment of GHG targets?	53
Question: 26.2. Are those incentives linked to monetary rewards?.....	53
Question: 26.3. Who is entitled to benefit from those incentives?.....	53
Theme: 27. Communications:	54
Question: 27.1. Do you publish information about the risks and opportunities presented to your company by climate change, details of your emissions and plans to reduce emissions?	54
Question: 27.2. The company’s Annual Report or other mainstream filings.....	54
Question: 27.3. Voluntary communications (other than to CDP) such as Corporate Social Responsibility reporting.....	55
Theme: 28. Public Policy:	56

Question: 28.1. Do you engage with policymakers on possible responses to climate change including taxation, regulation and carbon trading? If so, please provide details..... 56

Consultancy for Content and Texts:..... 57

Theme: 1. Regulatory Risks:

Question: 1.1. Is your company exposed to regulatory risks related to climate change?

Answer:

(X) We consider our company to be exposed to regulatory risks.

Relevant Information:

Cemig recognizes the regulatory risks arising from climate change and understands that political-regulatory mitigation measures focused on the issue of a carbon tax, on regulation and on emissions trading are among the most relevant consequences of these risks. Cemig also believes that these regulatory measures will grow exponentially in the medium and long term to compensate for the economic losses resulting from climate change, as is predicted in Nicholas Stern's report "The Economics of Climate Change", which examines the economic impacts of global warming.

However, Cemig, through its management, understands that its exposure to these risks, in international terms, may be considered low in the short term in view of the fact that its activities are concentrated, in their majority, in Brazil. It is worth noting that Brazil is not part of Annex 1 of the Kyoto Protocol and, therefore, does not have binding Greenhouse Gas (GHG) reduction targets. Cemig does, however, believe that following the expiration of the Kyoto Protocol (in 2012) there will be new agreements in which reduction targets will be established for countries not included in Annex 1 or sectoral targets for GHG emission reduction.

Cemig also recognizes the regulatory risks associated with national norms that establish the need to invest in mitigation measures for electricity generation activities with high carbon emissions, such as the use of thermoelectric plants. These measures may come to apply to the energy generation sector, which will be responsible for 40% of total global emissions in the year 2100, according to scenario B2 of the Report from the International Panel on Climate Change – IPCC.

However, Cemig is working to minimize these risks in advance by applying preventive measures in different scopes, such as by accounting for its GHG emissions since 2004, as well as taking actions that seek to reduce these emissions. In addition, Cemig invests in mitigation measures through energy efficiency programs and expansion projects for its Generation Park that are based on renewable sources of energy, mainly hydroelectric.

Aligned with this strategic concern, the Company has teams working in the regulation forums in the areas related to water (Water Resource Councils, Basin Committees and Agencies) and energy (Regulatory agencies and associations of companies in the electric sector), in addition to participating in forums and workgroups, including the State of Minas Gerais Forum on climate Change and the Technical Chamber for Energy and Climate Change – CTClima.

Theme: 2. Physical Risks:

Question: 2.1. Is your company exposed to physical risks from climate change?

Answer:

(X) We consider our company to be exposed physical risks.

Relevant Information:

Cemig is constantly conducting assessments and believes that its exposure with regards to physical risks related to climate change is primarily influenced by the fact that a large portion of its energy generation capacity is concentrated in hydroelectric plants.

Therefore, the amplitude of the impacts on its activities in the short and medium term is considered low. This assessment is based on the 4th Report from the IPCC, which presents scenarios regarding the effects of climate change on land-based water systems. For the period covered between the middle and the end of the 21st century, the IPCC suggests that the Southeastern region of Brazil may experience small fluctuations in the water cycle that may, possibly, lead to an increase in water availability, in the event there is an increase of 3 to 5°C in global temperatures.

On the other hand, specific studies, national in scope and related to climate change, present results that are unfavorable in relation to variations in water availability in the Paraná River hydrographic basin, where a large number of Cemig's plants are concentrated. According to the report "Climate change and Energy Security in Brazil" produced by the *Alberto Luiz Coimbra Post-Graduate and Engineering Research Institute – Coppe* – at the Federal University of Rio de Janeiro. a reduction of 2.4% by the year 2050 is possible in the aforementioned region.

Regardless of the situation in which it finds itself in the future, Cemig must be prepared, as 97.2% of its installed capacity is comprised of hydroelectric plants.

CEMIG GENERATION PARK IN 2008

Source	Installed Capacity	%	Generation 2008	%
	MW		MWh	
CEMIG Total	6,691	100	34,084	100
Hydroelectric	6,506	97.2	33,448.6	98.1
Thermal – fuel oil	131	2.0	205	0.6
Thermal – process gases ⁽¹⁾	53	0.8	430	1.3
Wind	1	0	0.037	0.0

(1). The Barreiro and Ipatinga Thermolectric Plants utilize blast furnace gases, tar and other waste gases generated in the processes at steel mills.

OBS: Net generation reflects generation at the plant, while in the energy balance the generation at the center of gravity is considered. To reflect the generation at the center of gravity it is necessary to consider the application of the basic network losses.

Cemig and its controlled companies own 63 plants, with 58 being hydroelectric, four thermoelectric and one wind power, with a total installed capacity of 6,691 MW. It is worth noting that of the four existing thermoelectric plants, one is deactivated, two utilize process waste gases and therefore do not emit greenhouse gases and only one utilizes fuel oil to generate electricity.

In addition to the physical risks related to energy generation, Cemig also considers the risks in energy distribution and transmission, based on studies that identify the greatest incidence of extreme events, such as floods, strong winds, prolonged periods of drought, torrential rains and others. These events may impact energy transmission and distribution processes, as well as the operation of hydroelectric plant reservoirs.

Due to the presence of these risks, Cemig invests in several preventive monitoring programs for its activities:

- Extensive monitoring network which continuously monitors hydro-climatological events, with the goal of conducting studies and analyses of the effects of climate change;
- Specific flood control mechanisms, in addition to producing daily meteorological forecasts, including storm warnings, to inform and instruct local communities about river conditions (where the water level and flow are monitored). The Company also monitors hydro-meteorological and sedimentological events in the areas surrounding 150 stations located along rivers and reservoirs.
- Makes available to society the operative data for the main Company reservoirs. This data originates in Cemig's Hydro-meteorological Telemetry System. The System is composed of 95 field telemetry stations and transmits, on-line, data that is of use to various sectors of the Company and society when undertaking hydro-climatological monitoring.
- Maintenance of a real-time Storm Tracking System – SLT, which was installed in 1988 with the goal of detecting storms and processing, distributing and storing information on lightning, and thereby contributing to Cemig's meteorological warnings;
- Undertaking a revision program called "*Cheia de Projeto do Vertedor*", with the objective of assessing the operational conditions of the hydroelectric plant spillways and determining if there is a need for an operative or physical adjustments to the dam;
- Consolidated the Dam Safety Plan, in which directives were established for the development of an Emergency Action Plan and the updating of the Intelligent Dam Control and Safety System – INSPETOR. In 2008, 100 maintenance, generation infra-structure improvement and environmental compliance operations were undertaken on the dams, with an emphasis on

the reassessment and reestablishment of the structural and functional safety conditions of the dams and their associated facilities;

- Developed the preliminary Emergency Action Plans for any possible ruptures of the dams. These plans contain communication flowcharts, the names of those responsible for the response actions, the manner of detecting the emergency and the alert level, in addition to the beginning of an effort to develop maps of downstream flooding;
- An effort to adopt alternative distribution network technologies (protected and insulated networks) to improve the coexistence between the urban trees and overhead distribution networks, preventing energy supply interruptions from the falling of trees on the electric network. With this in mind, in March, 1999, the Company adopted the Protected Distribution Network – RDP as its new minimum standard for urban service, definitively replacing the conventional bare networks and making it the first utility in Brazil to adopt the RDP as the minimum standard for urban service.
- Engaging in focused tree pruning activities – considered the most appropriate technique for use near overhead distribution networks and offering courses in arboriculture and tree pruning to various municipal authorities in the State of Minas Gerais.
- Maintains 5,750 km of protected and insulated networks in the primary system, representing 17.8% of the total primary urban networks. Regarding secondary urban networks, 23,955 km consist of insulated networks, representing 43.8% of the total secondary urban networks.
- Monitoring wildfires in order to protect its transmission lines and monitoring the behavior of the ambient temperature, predicting trends in physical growth and temperature anomalies, which allows for safer generation planning and transmission line loading, thereby minimizing the risk of circumstantial and structural interruptions in the electric system.

Theme: 3. Other Risks:

Question: 3.1. Is your company exposed to other risks as a result of climate change?

Answer:

(X) We consider our company to be exposed to other risks.

Relevant Information:

The risks inherent to Cemig's business activities are assessed in terms of their probability of occurrence and their impact on the various activities in the value chain. In order to properly engage in Risk Management, Cemig has established strategic control indexes with the goal of reducing its financial, environmental and social exposure and the resulting tangible and intangible impacts.

Cemig believes that, in addition to physical and regulatory risks, it is exposed to other risks related to climate change, indirectly resulting from climate change that may influence the management and operation of the energy generation, transmission and distribution businesses.

Cemig believes (and views as a strategic risk) that it is possible there will be changes in energy consumption patterns due to the influence of global warming through an increase in demand for energy for use in refrigeration and air conditioning systems. As a function of these risks, the Company is investing in the expansion of its Generation Park.

In addition, those risks related to the reputation and image of the company as a function of its positioning and the activities it undertakes in relation to climate-related issues are taken into consideration. Therefore, Cemig has adopted measures aimed at mitigating the impacts related to climate change that were described in answers to previous questions, in addition to being transparent, with regard to its sustainability activities, in all dealings with its stakeholders. Of note among the communication and transparency activities is the annual publication of Cemig's sustainability report since 2006, in which its main actions and strategies related to economic, environmental and social issues are consolidated and reported.

Also, as part of the process of communicating with society, Cemig maintains the "Communication Plan" Program, which operates in the communities in the areas influenced by its reservoirs. The Program, in addition to providing information about the plants and operational procedures during rainy and dry seasons, also passes on information about the rivers which the Company constantly monitors. This program helps authorities, community leaders, the press, environmental organizations and representatives of civil society to understand the management of the reservoirs and the environmental actions undertaken in each region, thereby creating a company-population-press partnership for the exchanging of information and providing information during critical events. Also dealt with are the preventive and safety practices for the reservoirs, which exist to reduce risks as much for people as for properties and the environment.

Theme: 4. Regulatory Opportunities:

Question: 4.1. Do regulatory requirements on climate change present opportunities for your company?

Answer:

(X) Regulatory requirements present opportunities for our company.

Relevant Information:

The main opportunity identified by Cemig, pertaining to regulatory measures regarding climate change, are the Clean Development Mechanism – CDM projects – according to the directives of the Kyoto Protocol, in view of the fact that Brazil, as a country that is not included in annex 1, does not have GHG reduction targets.

As part of its strategy for this opportunity, Cemig has created a workgroup that has identified different opportunities for the development of CDM projects in the carbon market and has also established in its management system an analysis tool with the goal of evaluating carbon projects for each new enterprise. This workgroup conducted a diagnostic to identify which projects, be they existing, under development or in the study phase, fit within the CDM and, at the same time, represent potential sources of Carbon Credits for Cemig.

Each project underwent information collection, feasibility assessment and technical and financial characteristic description stages in an effort to measure the potential for the generation of Carbon Credits – Certified Emission Reductions (CERs).

Access to information and analyses was obtained in the following Cemig areas or companies:

- Generation;
- Transmission;
- Distribution;
- Management;
- The Efficientia company (ESCO);
- New Businesses;
- Technology and Renewable Energy.

Some projects that were identified as possibly qualifying for the CDM were:

- Fuel switch (conversion of the boiler to burn natural gas);
- Reforestation of riparian and planted forests;
- Replacement of SF₆ circuit breakers;
- Energy efficiency projects such as heating water with solar energy in low income housing;

- Increasing the power of thermoelectric plants, small hydroelectric plants, wind farms and co-generation plants.

With the diagnostic to identify possible projects within the scope of the CDM, it was possible to identify future opportunities for Cemig which affect its commercial activities in a positive manner. The CDM incentive, however, has contributed towards the concrete definition of these projects and towards the sustainable development of the region.

Cemig has two areas that are responsible for CDM projects: The New Business Ventures Executive Office and the Wholesale Energy Purchase and Sale Superintendence. These areas have formal attributions that are related to prospecting for projects and analyzing the business opportunities involving carbon credits and their commercialization.

Currently, Cemig has an ongoing CDM project at the Barreiro Thermal Plant, which employs steam to generate electricity by utilizing the industrial process gases from a steel mill. The Barreiro Thermal Plant project was approved by the Executive Board of The United Nations Framework Convention on Climate Change – UNFCCC. Though it owns 100% of the assets, Cemig ceded the carbon credits from this project to the Vallourec&Mannesman steel company which is the supplier of the fuel used in the plant.

In 2008, Efficientia S.A. – a company that provides services, is owned by Cemig and operates in the field of energy solutions – began the development of a project to obtain carbon credits within the Clean Development Mechanism environment. The project involves energy co-generation utilizing gas from a blast furnace. The project is published on the United Nations Framework Convention on Climate Change –UNFCCC website and is currently being validated by a Designated Operational Entity (DOE).

Theme: 5. Physical Opportunities:

Question: 5.1. Do physical changes resulting from climate change present opportunities for your company?

Answer:

(X) Physical changes present opportunities for our company.

Relevant Information:

Identifying the physical changes resulting from climate change as an opportunity and based on the 4th Report from the IPCC, it has been shown that in the Southeastern and Southern regions of Brazil, where Cemig has reservoirs, the availability of water may fluctuate between a maintenance level and an increase in water availability, as we near the regions in high Southern latitudes. By virtue of this, the production of electricity may increase with alterations in the climate.

Cemig also believes that the increase in extreme events and in temperature variations may influence the demand for energy due to increased usage of refrigeration systems which, consequently, increase the generation, transmission and distribution of energy, expanding in economic terms the company's activities. Cemig is therefore expanding its Generation Park, with the bulk of investments going into the construction of hydroelectric plant (as seen in the table below, which shows the main projects under construction).

Projects	Power	CEMIG Share	Invested up to 2008 R\$ million	Scheduled initiation of operations
Baguari Plant	140 MW	34.0%	140	1 st half/2009
Dores de Guanhões, Senhor do Porto, Fortuna II and Jacaré SHPs	44 MW	49.0%	10	2 nd half/2009
Santo Antônio Plant	3,150 MW	10.0%	-	1 st half/2012
Pipoca SHP	20 MW	49.0%	4	1 st half/2010

Theme: 6. Other Opportunities:

Question: 6.1. Does climate change present other opportunities for your company?

Answer:

(X) Climate change presents other opportunities for our company.

Relevant Information:

Cemig is seeking other opportunities resulting from climate change for the energy sector. To this end, it is developing programs that include:

- Encouragement of Small Hydroelectric Plant – SHP and high efficiency co-generation (combined steam and electricity) projects;
- Refurbishment of its hydroelectric plants;
- Incentives for the production of technologies and development of projects directed towards alternative sources of energy, such as: solar, wind, hydroelectric, biomass, fuel cells, biodiesel and others; and
- Undertaking sustainable energy consumption projects, including more efficient processes in terms of electricity, in partnership with its residential, commercial, industrial and agricultural clients.

The Small Hydroelectric Plant (SHP) investment projects are part of the Minas SHP Program, initiated by Cemig with the goal of expanding its Generation Park through the construction of SHPs in the State of Minas Gerais as part of an effort to develop generation projects that provide a boost to the development of regional markets in the state. This is being done in partnership with local universities and the expected creation of new partnerships.

Cemig has been undertaking a broad refurbishment program for its plants. The objective is to extend the useful lives of the plants, estimated at 30 years post-refurbishment. The project includes updating the technology in the regulation, induction and protection systems, in addition to the refurbishment of the generators and turbines. The refurbishment of the plants results in not only the reestablishment of their useful lives, but also for an increase in operational reliability, greater efficiency of physical and electrical protection and improved responses to fluctuations in the system.

In 2008, Cemig concluded the refurbishment of the Jaguará plant. The refurbishment of the Três Marias, Volta Grande and Salto Grande plants is expected to be completed by 2011. The total expected investment is in the order of R\$ 36 million by 2011.

From 2009 to 2013, four generator units at the Volta Grande Plant and 6 generator units at the São Simão Plant are scheduled to be refurbished, with expected investments of R\$ 46 million and R\$ 58 million, respectively.

In addition, Cemig is researching, in partnership with universities and research centers, the feasibility of energy generation projects utilizing biomass. An

important step was the development and construction, with domestic technology, of the first Stirling engine coupled directly to a furnace for the burning of wood chips. This experimental installation allows for the generation of 9 kW of electricity with the direct burning of biomass. The projects also continue with the demonstration of: micro turbines, co-generation with an absorption chiller and biomass gasification technologies.

Cemig is working to take advantage of energy generation opportunities based on solid urban waste. To this end, a technical study was commissioned on the main commercial technologies and suppliers, taking into consideration an assessment of their general characteristics, the application of the technology and the standard costs for the construction of plants for the energy generation from waste, including the exploitation of landfills and the energy generation from tree pruning waste.

An assessment was undertaken of the wind energy potential of some promising sites in the State of Minas Gerais. A project was then initiated to conduct research and development of small wind power generators that are appropriate for installation in mountainous regions and could potentially service remote locations.

In February of 2009, Cemig acquired a 49% share of three wind farms owned by Energimp S.A. These farms are located in the State of Ceará: Central Eólica Praias de Parajuru (28.8 MW), in the municipality of Beberibe (110 km from Fortaleza); Central Eólica Praia do Morgado (28.8 MW) and Central Eólica Volta do Rio (42.0 MW), both in the municipality of Acaraú (about 250 km from Fortaleza); a total of 99.6 MW of installed capacity. The total investment will be of R\$ 213 million.

The closing of the deal and the effective acquisition of the shares by Cemig will be subject to the approval of the National Electricity Agency – Aneel, the Caixa Econômica Federal bank and Eletrobrás. In addition, details of the deal will be sent to the Economic Defense Administrative Council – Cade.

In 2008, partnerships were established with 8 companies for the installation ethanol and sugar plants within the scope of the Minas Gerais Sugar-Alcohol Sector Development Incentive Program. The signatories of this program are Cemig, the State of Minas Gerais, the State Secretary of Economic Development – SEDE, the Minas Gerais Development Bank – BDMG and the Minas Gerais Integrated Development Institute – INDI.

Currently, the Company is working with other State bodies and research centers to consolidate biodiesel production technology in Minas Gerais, using the identification of regional potential for the cultivation of oil-producing plants, the construction of small pilot-project plant for the experimental production of this fuel and, also, the establishment of laboratory infrastructure in a state research organization in order to qualify and certify the biodiesel, thus contributing to its entry into the domestic market. Already operational is the Biofuel Laboratory at the Minas Gerais Technological Center Foundation (CETEC), with a production

capacity of 1,000 liters/day of biodiesel, which is being used experimentally in motor generator group and in a micro turbine.

Cemig is continuing to invest in R&D projects for the purification of existing metallurgical grade silicon in Minas Gerais and the development of low-cost photovoltaic cells. Another of the company's initiatives is directed towards research and experimentation relating to the use of solar thermal energy by means of a solar thermoelectric process, utilizing cylindrical-parabolic concentrators and also for heating water in a centralized manner, utilizing flat solar collectors for low income communities.

Cemig also has an experimental laboratory for the production of hydrogen through electrolysis and by ethanol processing and in 2008 produced gas with a purity of 99.9%. The main challenges in making the fuel feasible are: a reduction in production costs, storage and transport. The hydrogen will be initially utilized in fuel cell tests, supplying internal demand and, also, as a chemical element for the purification of the silicon used in photovoltaic cell research projects.

Aware of the opportunities that could arise from this technology, the Company has been undertaking, since 2000, R&D projects linked to low temperature (PEM) and high temperature (SOFC) cells. Regarding the PEM cell, an R&D project is underway for the development of carbon nanotubes, polymer membranes and the application of DLC (Diamond-like Carbon) techniques with the goal of reducing costs and external dependence on components. As for the SOFC cell, the fuel cell laboratory was upgraded and during the year first tests were conducted with prototypes called PA and PB, which were designed and constructed with entirely domestic technology. Following an analysis of the results obtained from the prototype tests, the assembly and testing of a 50 W fuel cell will be undertaken. Also begun was the development of an integrated energy generation system based on the gasification of biomass through the conversion of SOFC fuel cells.

Cemig, in partnership with Itaipu Binacional and Fiat Automóveis, is conducting a research project and technical and economic feasibility study for the use of electric vehicles. At the end of 2008, four electric Fiat Palio Weekend vehicles were received. The company will test the prototypes in its fleet during the next year with the goal of assessing the operational and maintenance

Cemig's initiatives are also related to the replacement of more polluting fuels with natural gas. In this sense, Gasmig, a company owned by Cemig and Gaspetro, has the goal of realizing the benefits of using natural gas in industry and automobiles, thereby increasing the energy efficiency of the processes and leading to improved operational performance.

Among the projects to expand Gasmig's natural gas distribution capacity is the Sul de Minas Project, which is ongoing and, with investments of approximately R\$ 132 million, is scheduled to begin operations in July of 2009. These networks extend for 110 km and will be supplied by the Paulínia – Jacutinga transport pipeline which is being constructed by Petrobrás.

Another important investment is the Vale do Aço Project, which will see investments of R\$ 661 million. Work on the project is expected to begin in March of 2009 and it is scheduled to become operational in March of 2010. These networks will extend for 278 km and the supply will be made available through the expansion by Petrobrás of the transport capacity of the Gasbel – Rio/Belo Horizonte pipeline.

In 2008, the volume of natural gas sold by Gasmig was 881,148,000 m³, with 59.1% for industrial use, 8.3% for automotive use and 32.6% for thermal generation. With 407 km of network, Gasmig serviced 269 clients in 22 municipalities in the Belo Horizonte Metropolitan Region, the Zona da Mata region, the Vale do Aço region and Southern Minas Gerais.

Theme: 7. Reporting Year:

Question: 7.1. Please state the start date and end date of the year for which you are reporting GHG emissions.

Answer:

The accounting period for this report is from January 01 to December 31, 2008.

Theme: 8. Reporting Boundary:

Question: 8.1. Please indicate the category that describes the company, entities, or group for which Scope 1 and Scope 2 GHG emissions are reported.

Answer:

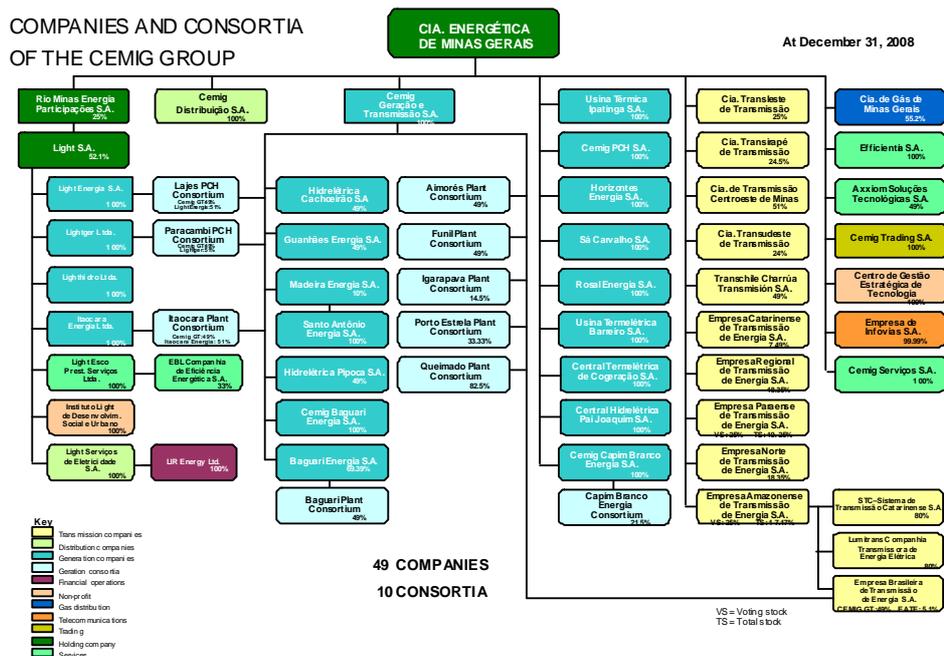
- (X) Companies over which operational control is exercised;

Relevant Information:

The inventory reported in this document refers to the controlling entity, Companhia Energética de Minas Gerais S.A. – Cemig and its whole subsidiaries: Cemig Distribuição S.A. and Cemig Geração e Transmissão S.A., with these being the main companies owned by the controlling entity. In the event that within the text additional information is mentioned regarding other companies in the group, this will be specified in the text itself.

All of the companies directly controlled by Companhia Energética de Minas Gerais – Cemig are those in which the Company owns a 100% equity share, as shown in the organizational chart.

Cemig operates in several Brazilian states in the generation, transmission, distribution and commercialization of electricity. The group is controlled by a holding company and, in addition to its subsidiaries, owns shares in energy distribution utilities (Light) and in various energy transmission companies, investments in the distribution of natural gas (Gasmig) and data transmission (Infovias), in addition to two sections of a Transmission Line between the Charrúa and Nueva Temuco substations, both located in Chile (see organizational chart below).



Question: 8.2. Please state whether any parts of your business or sources of GHG emissions are excluded from your reporting boundary.

Answer:

All the companies for which complete shareholder control is not held by the Companhia Energética de Minas Gerais – Cemig are outside GHG Emissions Inventory boundary, as they have operational control of their own activities, reporting financially to the holding company.

Theme: 9. Methodology:

Question: 9.1. Please describe the process used by your company to calculate Scope 1 and Scope 2 GHG emissions including the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 GHG emissions.

Answer:

The GHG Emissions Inventory conducted by Cemig follows the directives of the GHG Protocol and includes the following phases: identification of the sources of GHG emissions; data collection; determination of the emission factors and calculation of the CO₂e emissions.

The choice of the appropriate calculation method was the result of data availability for the activities, the specific emission factors, the combustion technologies used in the process and other characteristics that are particular to the emission sources.

The main emission sources in Cemig's activities were identified by each areas of the Company, as they resulted from the use of fossil fuels in the operation of the Igarapé Thermal Plant, emissions of SF₆, land and air travel using Cemig's own fleet (Scope 1), as well as the consumption of electricity (Scope 2).

After this stage, data was collected on the consumption of fossil fuels, energy consumption and SF₆ consumption resulting from equipment installed in electric distribution networks and their substations.

For the identification of emission factors, Cemig adopted, in respective order, specific national factors and recognized by the principle of applicability, as was the case with the consumption of energy in the national interconnected system, followed by emission factors from bodies with high global credibility such as the GHG Protocol of the World Business Council for Sustainable Development e World Resources Institute [GHGp].

Specifically for the accounting of GHG emissions resulting from the use of gasoline, Cemig utilized the national gasoline factor, in which 22% to 25% of its composition is considered to be of sugarcane ethanol. One of the benefits of this percentage is a lower emission of carbon, which implies a lower emission factor.

At the Igarapé Thermal Plant, the methodological process consists of measuring the consumption of fuel oil utilized in the operation of the plant. Based on the results of this monitoring, stoichiometric calculation of the fuel oil burning reaction based on the concentration of carbon in the oil are made.

Cemig also utilizes a specific methodology for the calculation of SF₆ emission from electrical equipment. According to a study conducted by the Environmental Protection Agency – EPA in 2006 called “SF₆ Leak Rates from High Voltage Circuit Breakers – U.S. EPA Investigates Potential Greenhouse Gas Emissions Source”, this calculation is based on the premise of an average annual escape rate of 2%. The volume of gas utilized to reposition equipment is also considered.

Information on fuel consumption is calculated based on the internal control of the transport areas, with the consolidation of the Total Fleet Control – TFC, allowing for a more precise refueling management of the Company’s vehicle. During refueling, antennas installed on the lip of the pump nozzle and the access to the gas tank communicate, vehicle data is checked and, refueling only occurs when the nozzle is inside the gas tank access point. At the end of the operation, the data is stored automatically in equipment installed at the station and transmitted electronically to the Processing Center, securely and with no human intervention.

It is worth noting that the inventory has been conducted annually since 2004.

Question: 9.2. Details of any assumptions made.

Answer:

To record SF₆ emissions, Cemig utilizes in its calculations the premise of an average annual escape rate of 2% of SF₆ during the utilization of electrical equipment.

This hypothesis is based on a study conducted by the Environmental Protection Agency – EPA in 2006 called “SF₆ Leak Rates from High Voltage Circuit Breakers – U.S. EPA Investigates Potential Greenhouse Gas Emissions Source”, in which empirical studies were conducted of the escape of SF₆ from approximately 2,300 pieces of equipment in the U.S.A. installed between 1998 and 2002

Question: 9.3. The names of and links to any calculation tools used.

Answer:

Indicate the Methodologies Adopted:

(X) Brazil GHG Protocol Program

(X) Other (please specify): 2006 IPCC Guidelines for National Greenhouse Gas Inventories

Indicate the Tools Used:

(X) GHG Protocol - CO₂ emissions from fuel use in facilities 3.0 March 2008

(X) GHG Protocol - CO₂ emissions from transport or mobile sources 1.3 January 2005

Question: 9.4. The global warming potentials you have applied and their origin.

Answer:

Global Warming Potentials for CO₂ (GWO = 1) and SF₆ (GWP = 23,900) are considered in the inventory, based on data supplied in IPCC reports.

Question: 9.5. The emission factors you have applied and their origin.

Answer:

Emission Factors utilized in Scope 2 National grid:

Base year 2008: 0.0484 tons of CO₂/MWh

Base year 2007: 0.0293 tons of CO₂/MWh

Base year 2006: 0.0323 tons of CO₂/MWh

Fossil Fuels:

Emission Factor: Gasoline: 2.17 kg of CO₂/l

Source: Brazil GHG Protocol

Emission Factor: Diesel: 2.68 kg of CO₂/l

Source: Brazil GHG Protocol

Emission Factor: Jet Kerosene: 3150 kg of CO₂/Ton

Source: IPCC, 2006

Theme: 10. Scope 1 Direct GHG Emissions:

Electric utilities should report emissions by country/region using the table in question EU3.

Question: 10.1. Total gross global Scope 1 GHG emissions in metric tonnes of CO₂-e.

Answer:

EU3. Absolute Emissions:								
Please give historic and forecasted GHG emissions in metric tonnes CO ₂ -e by country and fuel type.								
	Reporting period ending in...							
Enter reporting	2001	2002	2003	2004	2005	2006	2007	2008
g period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 Dec 2002 here:					1Jan 2005 – 31 Dec 2005	1Jan 2006 – 31 Dec 2006	1Jan 2007 – 31 Dec 2007	1Jan 2008 – 31 Dec 2008
Enter country name here:					Brazil	Brazil	Brazil	Brazil
Fuel oil					11,832	97,671	180,848	184,751
Total for all countries					11,832	97,671	180,848	184,751

Total global Scope 1 emissions in metric tonnes of CO₂-e:

207,657 tCO₂e

Total global Scope 1 emissions in metric tonnes of CO₂-e for countries mentioned in Annex B.

207,657 tCO₂-e

Relevant Information:

It is worth noting that the Igarapé Thermal Plant contributed 89% of total emissions. This unit is activated to meet contingencies in the interconnected electric system and, in 2008, to export energy to Argentina and Uruguay. It has an installed capacity of 131 MW, burning fuel oil to produce energy and operated for 2,985 hours in 2008.

Please break down your total gross global Scope 1 emissions by:

Question: 10.2. Country or region

Answer: Brazil

Question: 10.3. Business division

Answer:

- **Cemig Geração e Transmissão:** 191,471 t CO₂-e
- **Cemig Distribuição:** 15,349 t CO₂-e
- **Cemig holding:** 837 t CO₂-e

Question: 10.4. Facility

Answer: NOT APPLICABLE

Question: 10.5. Please break down your total global Scope 1 GHG emissions in metric tonnes of the gas and metric tonnes of CO₂-e by GHG type.

Answer:

According to the inventory, the gases calculated were:

- CO₂: 203,208 t of CO₂-e
- SF₆: 197.77 t equivalent to 4,727 t CO₂-e

Question: 10.6. If you have not provided any information about Scope 1 emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 1 GHG emissions information in future.

Answer: NOT APPLICABLE

Theme: 11. Scope 2 Indirect GHG Emissions:

Question: 11.1. Total gross global Scope 2 GHG emissions in metric tonnes of CO₂-e.

Answer:

Total Gross global Scope 2 CO₂-e emissions in metric tonnes.

2,241 t CO₂-e

Total Gross global Scope 2 CO₂-e emissions in metric tonnes for countries mentioned in Annex B...

2,241 t CO₂-e

Please break down your total gross global Scope 2 emissions by:

Question: 11.2. Country or region

Answer: Brazil

Question: 11.3. Business division

Answer:

Cemig Geração e Transmissão: 1,680 t CO₂-e

Cemig Distribuição: 561 t CO₂-e

Cemig holding: 0 t CO₂-e

Question: 11.4. Facility

Answer: NOT APPLICABLE

Question: 11.5. If you have not provided any information about Scope 2 emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 2 GHG emissions information in future.

Answer: NOT APPLICABLE

Theme: 12. Contractual Arrangements Supporting Particular Types of Electricity Generation:

Question: 12.1. If you consider that the grid average factor used to report Scope 2 emissions in question 11 above does not reflect the contractual arrangements you have with electricity suppliers, (for example, because you purchase electricity using a zero or low carbon electricity tariff), you may calculate and report a contractual Scope 2 figure in response to this question, showing the origin of the alternative emission factors and information about the tariff.

Answer:

Cemig is active in the generation, transmission and distribution of energy and, therefore, it is responsible for the entire energy supply process

However, if compared Cemig's emission factor, in which 0.00628 t CO₂-e/MWh are emitted, is compared with the emission factor of the national grid prepared by the Brazilian Ministry of Science and Technology in 2008, which is 0,0484 t CO₂-e/MWh, it can be seen that Cemig's emission factor is below the national emission factor.

Question: 12.2. If you retire any certificates (eg: Renewable Energy Certificates) associated with zero or low carbon electricity, please provide details.

Answer: NOT APPLICABLE

Theme: 13. Scope 3 Other Indirect GHG Emissions:

For each of the following categories, please:

- Describe the main sources of emissions,
- Report emissions in metric tonnes of CO₂-e,
- State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Question: 13.1. Employee business travel

Answer: NOT DISCLOSED

Question: 13.2. External distribution/logistics

Answer: NOT DISCLOSED

Question: 13.3. Use/disposal of company's products and services

Answer: NOT APPLICABLE

Question: 13.4. Company supply chain

Answer: NOT APPLICABLE

Question: 13.5. Other

Answer: NOT APPLICABLE

Question: 13.6. If you have not provided information about one or more of the categories of Scope 3 GHG emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 3 indirect emissions information in future.

Answer:

Cemig does not record Scope 3 emissions, since during the period covered by the GHG inventory the focus of its activities was on actions that methodologically improve its emissions inventory in relation to Scopes 1 and 2, as is the case with the definition of emissions reduction programs.

Theme: 14. Emissions Avoided Through use of Goods and Services:

Question: 14.1. If your goods and/or services enable GHG emissions to be avoided by a third party, please provide details including the estimated avoided emissions, the anticipated timescale over which the emissions are avoided and the methodology, assumptions, emission factors (including sources), and global warming potentials (including sources) used for your estimations.

Answer:

Cemig's activities are focused on the generation, transmission and distribution of electricity, therefore, all investments in the efficient use of energy, as well as the maintenance of the supply of its services and products, are directly or indirectly responsible for the reduction in carbon emissions, thus avoiding the activation by the National Interconnected System – SIN of its thermoelectric plants to supply the deficits caused by a greater energy demand not supplied by the operation of hydroelectric plants.

Cemig maintains the use of hydroelectric plants as its main source of energy generation and supply. When compared to other companies in the energy sector outside of the national context, in which the energy generation is based on the use of thermoelectric plants, Cemig stands out as an energy supplier with low carbon emissions. Given the parameter of energy intensity, Cemig has an intensity equal to 6.28 kgCO₂-e/MWh, while at thermal generation-based companies that use, in equal parts, coal, natural gas and fuel oil, the CO₂ emissions intensity reaches approximately 750 kgCO₂-e/MWh.

Cemig also has invested in the refurbishment and construction of hydroelectric plants, in addition to investing in growing investments in more efficient transmission and distribution services.

Cemig is conducting a broad refurbishment program for its plants. The objective is to extend the useful lives of the plants, estimated at 30 years post-refurbishment. The project includes updating the technology in the regulation, induction and protection systems, in addition to refurbishment of the generators and turbines. The refurbishment of the plants results in not only the reestablishment of their useful lives, but also for an increase in operational reliability, greater efficiency of physical and electrical protection and improved responses to fluctuations in the system.

In 2008, Cemig concluded the refurbishment of the Jaguará plant. The refurbishment of the Três Marias, Volta Grande and Salto Grande plants is expected to be completed by 2011. The total expected investment in the refurbishments is R\$ 36 million by 2011. In addition, from 2009 to 2013, four generator units at the Volta Grande Plant and 6 generator units at the São Simão Plant are scheduled to be revitalized, with expected investments of R\$ 46 million and R\$ 58 million, respectively.

In addition, Cemig holds the annual “Energy Efficiency Program – PEE Cemig/Aneel”, in which different projects directed towards the efficient use of energy and the development of local urban and rural communities are undertaken.

Through the “Heating water with solar energy in Housing Projects” project, a partnership between Cemig, Cohab - the State of Minas Gerais Housing company and Sedru, the State Department of Regional Development and Public Policy –, 1,098 small solar collectors have been installed in 7 cities in the State of Minas Gerais, which has reduced energy consumption by 812 MWh/ year and demand by 549 kW, with investments of R\$ 2.5 million.

Also, 30 energy diagnostics have been conducted in large hospitals, which have resulted in the potential installation of a total of 5,000 m² of collector pannels. These systems are to be installed in the next two years and will reduce energy consumption by 3,000 MWh/year and demand by 2,20 kW, with investments of R\$ 8.7 million.

The Conviver Project, which begun in 2006 to provide low income clients with information regarding energy efficiency measures, is directed towards low income communities in the Metropolitan Belo Horizonte Region and involves the work of community relations agents. In 2008, 2,000 refrigerators and 2,000 heat recovery kits for electric showers were donated. These actions resulted in 2,156 MWh/year in savings and a reduction in energy demand of 900 kW, with investments of R\$ 6.7 million. Cemig handled all the logistics for the donations (receiving, handling, storage, fiscal/accounting procedures and distribution).

Also of note is the irrigation system replacement project in the Jaíba Irrigation District (DIJ) in northern of Minas Gerais, where 1,044 systems are to be installed, of which 89 were replaced in 2008, through an investment of R\$ 13,7 million. The new irrigation systems are totally automatic and more efficient, providing an energy savings of up to 55% and a 45% reduction in the volume of water used for irrigation, even generating a decrease in the monthly bill. This initiative will result in a savings of almost 9,000 MWh and a reduction of over 2,700 kW in energy demand. This project represents an innovation among energy efficiency programs directed at low income populations undertaken throughout the country, as it will serve the residents of collective irrigation areas that depend on agriculture for income generation.

In 2008, through Reluz, the Public Lighting Improvement Project, financed by Eletrobrás, R\$ 7 million were invested in projects in Belo Horizonte to replace mercury vapor lighting fixtures and bulbs with sodium vapor ones. Approximately 20,000 replacements were performed, with annual savings of 700 kW in demand and 3,000 MWh in energy. Since the implementation of Reluz Program in 2001, Cemig has modernized 215,000 public lighting fixtures in 290 municipalities, with investments of approximately R\$ 60 million, leading to an annual reduction of 6,700 kW in demand and a reduction of 29,000 MWh in energy consumption.

Thus, in 2008 R\$ 23.5 million were invested in the “Energy Efficiency Program – PEE Cemig/Aneel”, providing a reduction in energy consumption of

56,278 MWh/year and a reduction in peak Demand of 12.8 MW. With these programs, a reduction in Greenhouse Gas emissions of 2,723 tonnes of CO₂-e was achieved, indirectly, as the programs were undertaken in third party installations. With the energy saved it is possible to supply electricity to approximately 39,000 residences with an average consumption of 120 kWh/month.

Efficientia S.A., a service company owned by Cemig and active in the field of energy solutions, undertakes energy efficiency projects in industrial facilities, public bodies and companies. Efficientia was certified in 2006 as being in conformity with NBR ISO 9001:2000. It was the first Brazilian Esco – Energy Service Company to receive the certificate. Among the projects undertaken in 2008, of note is the creation of a co-generation plant with a 6MW capacity, which utilizes waste gases from a blast furnace at a steel mill. The total electricity generated at the plant will be 37,000 MWh/year. In addition, Efficientia concluded the implementation of 5 energy efficiency projects in the lighting, refrigeration and modernization areas in industrial facilities, saving over 3,000 MWh/year of electricity.

The energy savings generated by these projects, undertaken by Efficientia, surpassed 40,000 MWh/year, which corresponds to the annual consumption of 29,800 residences with an average consumption of 120 kWh/month and represents a reduction in annual emissions of approximately 2,000 equivalent tonnes of CO₂.

Theme: 15. Carbon Dioxide Emissions from Biologically Sequestered Carbon:

Question: 15.1. Please provide the total global carbon dioxide emissions in metric tonnes CO₂ from biologically sequestered carbon.

Answer:

Cemig does not possess a Forest inventory that quantifies the carbon sequestered in its forests. However, Cemig has over 4,000 hectares of forest reserves and produced, in 2008, 416,000 seedlings of native species that are utilized to meet its own demand and that of Municipal Governments, NGOs, Public Bodies and Environmental Institutions in environmental protection programs.

In addition, in 2008 48 hectares of riparian forests were recomposed along the shores of Company reservoirs in partnership with interested rural producers.

Theme: 16. Emissions Intensity:

Question: 16.1. Please supply a financial emissions intensity measurement for the reporting year for your combined Scope 1 and 2 emissions, including a description of the measurement.

Answer: NOT DISCLOSED

This information is not disclosed as Cemig understands it to be of strategic importance for the Company.

Question: 16.1.1. The units

Answer:

NOT DISCLOSED

Question: 16.1.2. The resulting figure.

Answer: NOT DISCLOSED

Question: 16.2. Please supply an activity related intensity measurement for the reporting year for your combined Scope 1 and 2 emissions, including a description of the measurement.

Answer:

The intensity of Cemig's emissions in 2008 was equal to 6.28 kg CO₂-e/MWh. This calculation is based on data considering the Company's potential to generate energy and the Scope 1 GHG emissions. This figure is smaller than the average company generating energy through a thermal matrix since they use, in equal parts, coal burning plants, natural gas and fuel oil burning plants and reach approximately 750 kgCO₂-e/MWh. The figure is also smaller than the average figure for the Brazilian Electric System, which is of 48.4 kg CO₂-e/MWh.

Question: 16.2.1. The units

Answer:

Kg CO₂e/MWh

Question: 16.2.2. The resulting figure.

Answer:

6.28 kg CO₂e/MWh

Theme: 17. Emissions History:

Question: 17.1. Do emissions for the reporting year vary significantly compared to previous years?

Answer:

- No
- First year in which the company has estimated its GHG emissions
- There is no data on calculated emissions
- There is not enough data to answer the question
- Data not reported in the CDP
- Yes

Relevant information:

When comparing the years 2007 and 2008, there was no significant variation in relation to GHG emissions. In this context, Cemig's emissions in 2008 were greater than in 2007 by 2.35%, and one of the main causes of this increase was the increased consumption of fuel oil at the Igarapé Thermal Power Plant, representing 2.08%, due to the increased in operational hours of thermoelectric plants to supply the SIN demands and also due to an increase in the emission factor of the national grid. It is worth noting that the burners in the boiler were replaced with more efficient equipment. In 2008 the thermal insulation of the gas ducts and expansion joints were replaced. These actions resulted in greater efficiency at the plant, which is demonstrated by a reduction in the emission intensity indicator which fell from 0.95 tonnes CO₂/MWh in 2007 to 0.90 tonnes CO₂/MWh.

Question: 17.1.1. Estimate the percentage by which emissions vary compared with the previous reporting year.

Answer:

Inform Percentage:

2.35%

Have emissions increased or decreased?

Emissions have increased, though not significantly.

Theme: 18. External Verification/Assurance:

Question: 18.1. Has any of the information reported in response to questions 10 – 15 been externally verified/assured in whole or in part?

Answer:

Cemig's inventory undergoes no auditing initiatives.

Question: 18.2. State the scope/boundary of emissions included within the verification/assurance exercise.

Answer:

NOT DISCLOSED

Question: 18.3. State what level of assurance, (eg: reasonable or limited) has been given.

Answer:

NOT DISCLOSED

Question: 18.4. Provide a copy of the verification/assurance statement.

Answer:

NOT DISCLOSED

Question: 18.5. Specify the standard against which the information has been verified/assured.

Answer:

NOT DISCLOSED

Question: 18.6. If not, please state whether you have plans for GHG emissions accounting information to be externally verified/assured in future.

Answer:

The data accounted for in the inventory has not been audited or verified by third party entities. However, Cemig recognizes the importance of such a verification and intends to have this data audited or verified by third parties in the future.

Theme: 19. Data Accuracy:

Question: 19.1. What are the main sources of uncertainty in your data gathering, handling and calculations e.g.: data gaps, assumptions, extrapolation, metering/measurement inaccuracies etc?

Answer:

The methodology adopted by Cemig in developing its inventory does not feature enough depth to allow for measuring uncertainty. Therefore, the Company is committed to refining its methodological process in the next few years.

Question: 19.2. How do these uncertainties affect the accuracy of the reported data in percentage terms or an estimated standard deviation?

Answer:

NOT DISCLOSED

Question: 19.3. Does your company report GHG emissions under any mandatory or voluntary scheme (other than CDP) that requires an accuracy assessment?

Answer:

Cemig, by means of its programs, seeks to raise awareness among its employees, partners and stakeholders of issues regarding climate change. Cemig has been voluntarily reporting its GHG emissions since 2004 and the Company's sustainability reports are published following the directives of the Global Reporting Initiative – GRI. However, no accuracy assessment is required for the development of this report.

Question: 19.3.1. The name of the scheme.

Answer:

The report on emissions in the sustainability report follows the directives provided by the Global Reporting Initiative - GRI, indicator EN16.

Question: 19.3.2. The accuracy assessment for GHG emissions reported under that scheme for the last report delivered.

Answer:

No third party verification was performed for the emissions reports in the latest reports.

Theme: 20. Energy and Fuel Requirements and Costs:

Question: 20.1. The total cost of electricity, heat, steam and cooling purchased by your company.

Answer: NOT APPLICABLE

This information is not disclosed as Cemig understands it to be of strategic importance for the Company.

Question: 20.1.1. Please break down the costs by individual energy type.

Answer: NOT APPLICABLE

This information is not disclosed as Cemig understands it to be of strategic importance for the Company.

Question: 20.2. The total cost of fuel purchased by your company for mobile and stationary combustion.

Answer:

This information is not disclosed as Cemig understands it to be of strategic importance for the Company.

Question: 20.2.1. Please break down the costs by individual fuel type.

Answer:

This information is not disclosed as Cemig understands it to be of strategic importance for the Company...

Question: 20.3. Your company's total consumption of purchased energy in MWh.

Answer:

Diesel: 25,304.36 MWh

Gasoline: 49,688.97 MWh

Jet Kerosene: 3,345.87 MWh

Question: 20.4. Your company's total consumption in MWh of fuels for stationary combustion only. This includes purchased fuels, as well as biomass and self-produced fuels where relevant.

Answer:

In 2008, 2,450,000 GJ of fuel oil were consumed, which is equivalent to

680,556.00 MWh.

Question: 20.4.1. Please break down the total consumption of fuels reported in answer to question 20.4 by individual fuel type in MWh.

Answer:

Distillate fuel oil No.1: 680,556.00 MWh

Question: 20.5. What is the total amount of energy generated in MWh from the fuels reported in question 20.4?

Answer:

The Igarapé Thermal Power Plant generated 204,999.00 MWh in 2008.

Question: 20.6. What is the total amount in MWh of renewable energy, excluding biomass, that is self-generated by your company?

Answer:

Utilization of wind sources: 37 MWh

Utilization of hydraulic sources: 32,777,313 MWh

Question: 20.7. What percentage of the energy reported in response to question 20.5 is exported/sold by your company to the grid or to third parties?

Answer:

All energy generated by Cemig is commercialized, be it for energy distributors or large consumers. Therefore, the percentage of the energy exported/sold reported in the answer to question 20.5 is 100%.

Question: 20.8. What percentage of the renewable energy reported in response to question 20.6 is exported/sold by your company to the grid or to third parties?

Answer:

All energy generated by Cemig is commercialized, be it for energy distributors or large consumers. Therefore, the percentage of the energy exported/sold reported in the answer to question 20.6 is 98.1%.

Theme: 21. EU Emissions Trading Scheme:

Question: 21.1 Does your company operate or have ownership of facilities covered by the EU Emissions Trading Scheme (EU ETS)?

Answer:

() We participate only in the EU ETS.

(X) We do not participate or expect to participate in any Carbon Credit Trading Market.

() We expect to participate in carbon credit markets other than the EU ETS.

Relevant information:

These questions do not apply, as Cemig's business activities are located in Brazil for the most part and the country is a signatory of the Kyoto Protocol as a Non Annex 1 member, that is, it has no GHG emission reduction targets.

Question: 21.2. The allowances allocated for free for each year of Phase II for facilities which you operate or own. (Even if you do not wholly own facilities, please give the full number of allowances).

Answer:

As explained in question 21.1,

NOT APPLICABLE

Question: 21.3. The total allowances purchased through national auctioning processes for the period 1 January 2008 to 31 December 2008 for facilities that you operate or own. (Even if you do not wholly own facilities, please give the total allowances purchased through auctions by the facilities for this period).

Answer:

As explained in question 21.1,

NOT APPLICABLE

Question: 21.4. The total CO₂ emissions for 1 January 2008 to 31 December 2008 for facilities which you operate or own. (Even if you do not wholly own facilities, please give the total emissions for this period.)

Answer:

As explained in question 21.1,

NOT APPLICABLE

Theme: 22. Emissions Trading:

Question: 22.1. Please provide details of any emissions trading schemes, other than the EU ETS, in which your company already participates or is likely to participate within the next two years.

Answers:

() Yes

(X) No

Relevant information:

These questions do not apply, as Cemig's business activities are located in Brazil for the most part and the country is a signatory of the Kyoto Protocol as a Non Annex 1 member, that is, it has no GHG emission reduction targets.

Cemig, however, considers the incentive and the investment in Clean Development Mechanism – CDM projects for the generation of carbon credits, both through voluntary market and through the Kyoto Protocol to be of strategic importance. That is why the Company has invested in the development of such projects.

Question: 22.2. What is your overall strategy for complying with any schemes in which you are required or have elected to participate, including the EU ETS?

Answers:

NOT APPLICABLE as described in Question 22.1

Question: 22.3. Have you purchased any project-based carbon credits?

Answer:

Cemig is not involved in any carbon credit acquisition process.

If so, please indicate whether the credits are to meet one or more of the following commitments:

() Primarily for compliance purposes,

() Primarily for voluntary offsetting of your own emissions,

() Other (please describe).

Answers:

Not applicable

Please, also:

Question: 22.4. Provide details including the type of unit, volume and vintage purchased and the standard/scheme against which the credits have been verified, issued and retired (where applicable).

Answers:

NOT APPLICABLE

Question: 22.5. Have you been involved in the origination of project-based carbon credits?

Answers:

Yes

No

Question: 22.6. Please provide details including:

- Your role in the project(s),
- The locations and technologies involved,
- The standard/scheme under which the projects are being/have been developed,
- Whether emissions reductions have been validated or verified,
- The annual volumes of generated/projected carbon credits,
- Retirement method if used for own compliance or offsetting.

Answers:

The Barreiro Thermal Plant Project already has a CDM project already registered at the Executive Board of The United Nations Framework Convention on Climate Change – UNFCCC for obtaining the Certified Emission Reductions. The Project is registered at the UNFCCC under the name of “Project 0143- UTE Barreiro S.A. Renewable Electricity Generation Project” (<http://cdm.unfccc.int/Projects/DB/DNV-CUK1134505349.88/view.html>).

Even though Cemig owns 100% of the assets, the credits obtained through this Project were ceded to the steel company Vallourec&Mannesman which is the company that provides the fuel the plant uses (steel production process gases).

In 2008, Efficientia – a service company owned by Cemig that provides energy solutions – started the development of a project to obtain carbon credits within the CDM scope. It is a cogeneration project utilizing blast furnace gases. The project’s Project Development Document (PDD) is published at the UNFCCC website at (<http://cdm.unfccc.int/Projects/Validationot>

<disclosedB/EZW11ESY15ECD7DZWI09D9AV533UF1/view.html>) and is currently undergoing a validation process by a Designated Operational Entity (EOD).

Worth noting in regards to Small Hydro Power Plants is the fact that Cemig and its partners in the *Sociedades de Propósito Específico Privadas – SPEs* (Private Specific Purpose Enterprise) have signed contracts with Carbotrader, a company specializing in the sector, for the development of CDM projects for the Cachoeirão (27 MW), Dores de Guanhões (12 MW), Senhora do Porto (14 MW), Fortuna II (9 MW) and Jacaré (9 MW) SHPs. These projects are in the final stage of the Project Development Document (PDD) development.

Question: 22.7. Are you involved in the trading of allowances under the EU ETS and/or project-based carbon credits as a separate business activity, or in direct support of a business activity such as investment fund management or the provision of offsetting services?

Answers:

Yes

No

NOT APPLICABLE

As explained in Question 21.1

Question: 22.8. Please provide details of the role performed.

Answers:

NOT APPLICABLE

As explained in Question 21.1

Theme: 23. Reduction Plans:

Question: 23.1. Does your company have a GHG emissions and/or energy reduction plan in place?

Answer:

Yes

No

Question: 23.2. Please explain why.

Answer:

According to the Kyoto Protocol, Brazil is a member of those Non-Annex 1 countries, that is, compulsory Greenhouse Gas emission reduction targets do not apply.

Despite not having any formal emission reduction or energy consumption targets, CEMIG invests in projects aimed at the application of renewable sources of energy, especially hydropower and small hydropower plants, biomass, solar energy and wind-electric generation. Additionally, the Company has invested in energy efficiency projects in third party facilities. Cemig also monitors its GHG emissions by means of a GHG inventory.

Question: 23.3. Do you have an emissions and/or energy reduction target(s)?

Answer:

Yes

No

Question: 23.4. What is the baseline year for the target(s)?

Answer: NOT APPLICABLE

Question: 23.5. What is the emissions and/or energy reduction target(s)?

Answer: NOT APPLICABLE

Question: 23.6. What are the sources or activities to which the target(s) applies?

Answer:

NOT APPLICABLE

Question: 23.7. Over what period/timescale does the target(s) extend?

Answer:

NOT APPLICABLE

Question: 23.8. What activities are you undertaking or planning to undertake to reduce your emissions/energy use?

Answer:

Cemig has adopted measures and strategies to reduce Greenhouse Gas emissions, such as the replacement of its vehicle fleet and efficiency measures aimed at energy conservation, mainly at third party facilities.

Cemig's Total Fleet Control – CTF program allows for the management of the refueling process of all Cemig vehicles. Between 2004 and 2008, the program reduced fuel consumption by 23%, which led to reductions of GHG emissions. Besides that, the Vehicular Fleet Replacement and Compliance Policy that was adopted by the Company, which establishes the average age limit for the fleet at 5 years. Within this policy the cargo and passenger vehicle lease and management project was approved and a total of 1,193 vehicles are to be replaced in 2009.

Question: 23.9. What benchmarks or key performance indicators do you use to assess progress against the emissions/energy reduction goals you have set?

Answer:

NOT APPLICABLE

Question: 23.10. What emissions reductions, energy savings and associated cost savings have been achieved to date as a result of the plan and/or the activities described above? Please state the methodology and data sources you have used for calculating these reductions and savings.

Answer: NOT APPLICABLE

Question: 23.11. What investment has been required to achieve the emissions reductions and energy savings targets or to carry out the activities listed in response to question 23.8 above and over what period was that investment made?

Answer:

Electricity services – please refer to the table in Question EU3 for details on emissions estimates.

Question: 23.12. What investment will be required to achieve the future targets set out in your reduction plan or to carry out the activities listed in response to question 23.8 above and over what period do you expect payback of that investment?

Answer:

NOT DISCLOSED

Question: 23.13. Please estimate your company's future Scope 1 and Scope 2 emissions for the next five years for each of the main territories or regions in which you operate or provide a qualitative explanation for expected changes that could impact future GHG emissions.

Answer:

With regards to emissions included in Scope 1 it is impossible to estimate the emissions due to the type of operations carried out by the Sistema Interligado Nacional – SIN (National Interconnected System), as it may demand a higher generation potential than the maximum generation capacity of the Hydroelectric Power Plants. Such surplus demand is supplied by an increase in activity of the other electricity generating units, mainly the Thermoelectric Plants. In this environment, Cemig's emissions may undergo expressive variations due to the intensification of operations in the Igarapé thermal plant, which will, consequently, lead to an increase or a reduction of fuel oil consumption.

In the same manner, estimates regarding Scope 2 emissions would be compromised as there is a tendency by which the emission factor in the Brazilian electricity grid may come to increase in coming years due to the commencement of operations at new thermoelectric plants to be linked to the SIN. A factor which is to influence Cemig's emissions.

Question: 23.14. Please estimate your company's future energy use for the next five years for each of the main territories or regions in which you operate or provide a qualitative explanation for expected changes that could impact future GHG emissions.

Answer:

There are no energy use estimates since Cemig's consumption results from the total activity at its industrial facilities and offices, and from the fuel consumed by the company's vehicle fleet, airplanes and at the Igarapé Thermoelectric Plant. In 2008, the Igarapé Thermal Power Plant was the main energy consumer at Cemig, representing 84% of all the energy consumed by the company. It is worth noting the fact that the plant is only activated to supply for contingencies at the SIN, so, it is not possible to effectively forecast its consumption in the coming years.

Question: 23.15. Please explain the methodology used for your estimations and any assumptions made.

Answer:

NOT DISCLOSED

Theme: 24. Planning:

Question: 24.1. How do you factor the cost of future emissions into capital expenditures and what impact have those estimated costs had on your investment decisions?

Answers:

There are no estimates regarding future emissions and future energy consumption. However, it is important to point out that the energy generated by Cemig is generated, mainly and for the most part, from renewable energy sources.

Cemig understands that the monitoring of these emissions through the GHG Emission Inventories, the search for clean sources of energy and the fostering of energy efficiency projects now, will be an advantage for Cemig in the future as new regulations may come to establish carbon emission goals for Brazil.

Theme: 25. Responsibility:

Question: 25.1. Does a Board Committee or other executive body have overall responsibility for climate change?

Answer:

Yes (Answer question 25.3 and 25.4)

No (Answer question 25.2 and Answer question 26)

Question: 25.2. Please state how overall responsibility for climate change is managed and indicate the highest level within your company with responsibility for climate change.

Answer:

NOT APPLICABLE

Refer to answer in Question 25.1.

Question: 25.3. Which Board Committee or executive body has overall responsibility for climate change?

Answer:

The Cemig Executive Board is constituted of 8 Executive Officers, elected by the Board of Directors. The Articles of Incorporation of the Company establish that the Vice-President's Office holds as one of its attributions the proposition of policies and directives regarding sustainability, social responsibility, the environment and quality improvement, thereby including the coordination of social and environmental projects of a strategic and corporate character.

The Executive Office for New Business Ventures holds the attribution of prospecting and assessing new business ventures related to carbon credits. The Commercial Executive Office holds the attribution of managing the commercialization of the Company's carbon credits, interacting with the Executive Office for New Business Ventures.

Question: 25.4. What is the mechanism by which the Board or other executive body reviews the company's progress and status regarding climate change?

Answer:

There is no formal policy developed specifically for reviewing the progress and status of the Company in regards to climate change. However, Cemig's sustainability report, which adopts the GRI's internationally renowned methodology, just as this document does, describes the climate change monitoring-related activities and the results achieved by the Company's initiatives.

Another important tool is the inventory of Greenhouse Gas Emissions that provides the directives for the annual monitoring of those emissions in the company. The inventory results can be found in both documents, which are available at Cemig's website.

Additionally, Cemig takes part in several sustainability ratings which include questions about the Company's initiatives regarding climate change.

Cemig is considered today a world leader in sustainability. The Company has been listed in the Dow Jones Sustainability World Index (DJSI World) 9 consecutive times, and it has also been listed for the 4th consecutive year in the Bovespa Corporate Sustainability Index (ISE/Bovespa). Furthermore, Cemig is now listed as a Gold Class company in the Electricity Sector by The Sustainability Year Book 2009. In November, Cemig was selected to be a member of The Global Dow Index – GDOW along with another 149 companies from 49 different countries. Cemig is one of the three Brazilian companies and the only one from the Latin American Electricity Sector to participate in this worldwide index.

Theme: 26. Individual Performance:

Question: 26.1. Do you provide incentives for individual management of climate change issues including attainment of GHG targets?

If yes:

Answers:

No. (Answer question 27.1)

Yes. (Answer question 26.2)

Question: 26.2. Are those incentives linked to monetary rewards?

Answer:

NOT APPLICABLE

Question: 26.3. Who is entitled to benefit from those incentives?

Answer:

NOT APPLICABLE

Theme: 27. Communications:

Question: 27.1. Do you publish information about the risks and opportunities presented to your company by climate change, details of your emissions and plans to reduce emissions?

Answer:

Yes

No

Relevant information:

Cemig produces and makes available its Sustainability Report on an annual basis. Based on the Global Reporting Initiative – GRI, the report presents details of the Company’s initiatives undertaken during the year relative to the report. The report can be found and read at:

http://v2.cemig.infoinvest.com.br/static/enu/relatorios_sustentabilidade.asp

This report also contains information on GHG emissions in that year and the four previous years, as well as the energy efficiency measures and the projects that were conducted concerning the identification of opportunities regarding climate change. In regards to the CDM, information on those projects that are in the validation stage or being developed, as well as other types of information regarding the environment and the social and economic realms is disseminated.

The Carbon Disclosure Project – CDP questionnaire is another publication that the Company uses to disseminate information on the opportunities and risks posed by climate change. The answers can be found in Portuguese and English at Cemig’s website at:

<http://v3.cemig.infoinvest.com.br/enu/s-16-enu.html>

Question: 27.2. The company’s Annual Report or other mainstream filings.

Answer:

Yes

No

For communicating with investors Cemig makes information available at its website <http://v2.Cemig.infoinvest.com.br/>, which provides access to annual reports that contain financial information and the sustainability reports. These reports disclose to investors all social, economic and environmental initiatives undertaken by the company. Besides the annual reports there are the CVM (Securities and Exchange Commission of Brazil) reports, the SEC Report (SEC EDGAR Filing Information) and spreadsheets that demonstrate fundamental indicators, history of balance sheets, analyses of results and all information provided to stock exchanges around the world, both in English and Portuguese.

Cemig's answer to the CDP questionnaire, sustainability item, is available at the aforementioned website, also in both languages.

The sustainability report can be accessed at:

http://cemig.infoinvest.com.br/static/ptb/relatorios_sustentabilidade.asp

The Annual Report can be accessed at:

<http://cemig.infoinvest.com.br/static/ptb/relatorios.asp>

Question: 27.3. Voluntary communications (other than to CDP) such as Corporate Social Responsibility reporting.

Yes

No

Answer:

<http://Cemig.infoinvest.com.br/static/ptb/relatorios.asp#>

For further information, please access the website addresses below:

<http://v2.Cemig.infoinvest.com.br>

www.Cemig.com.br

Theme: 28. Public Policy:

Question: 28.1. Do you engage with policymakers on possible responses to climate change including taxation, regulation and carbon trading? If so, please provide details.

Answer:

Yes

No

Relevant information:

Four members of Cemig's staff are participating in the Climate Change and Energy Technical Chamber at COPAM – the State Council for Environmental Policies. It is important to point out that these Technical Chambers are important forums for the discussion and the proposition of directives that are aimed at establishing the norms and policies regarding the reduction of atmospheric emissions and greenhouse gases, and which represent alternatives for the improvement of environmental quality and the promotion of sustainability in the State of Minas Gerais.

Consultancy for Content and Texts:

