

Module: Introduction**Page: Introduction**

CC0.1**Introduction**

Please give a general description and introduction to your organization.

Celsia is a public utility company specializing in the business of generation and sale of electricity. We currently have an installed generating capacity of 2,312MW represented in twenty-five plants (25) located in Colombia, Panama and Costa Rica.

In Colombia we have two thermal plants, Celsia's Free Trade Zone [Zona Franca Celsia] and Meriléctrica, which are located in the cities of Barranquilla and Barrancabermeja, respectively. Similarly, we have two (2) small hydroelectric plants: Río Piedras in Jericó and Hidromontañas in Donmatías and Santa Rosa de Osos municipalities (Antioquia).

Additionally, we have a 50.01% stake in Empresa de Energía del Pacífico S.A. E.S.P. (EPSA), which is present in the four (4) phases of the energy business: generation, transmission, distribution and marketing, and it is present in the departments of Valle del Cauca, Tolima, Cauca and Chocó. EPSA also owns a majority stake in the Compañía de Electricidad de Tulúa S.A. E.S.P. (CETSA), which serves the municipality of Tulúa.

In transmission and distribution businesses, EPSA has seven (7) substations and a network of 274 kilometers with voltages over 220 kV, as well as 72 substations and 19,955 kilometers with voltages below 220 kV.

Meanwhile, in the marketing business, it serves 553,671 customers in 39 municipalities in Valle del Cauca and one (1) municipality of Chocó (San José del Palmar), and it has developed a network of 28 sales offices, 1,494 payment points and 49 call centers.

In Panamá and Costa Rica, our presence extends across seven (7) power plants using hydro, thermal and wind technologies.

We work under approaches of excellence, seeking results that create value over time for all our stakeholders.

CC0.2**Reporting Year**

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year. Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Wed 01 Jan 2014 - Wed 31 Dec 2014
Tue 01 Jan 2013 - Tue 31 Dec 2013
Sun 01 Jan 2012 - Mon 31 Dec 2012

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
Colombia

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

COP

CC0.6**Modules**

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Further Information

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Other Manager/Officer

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

From commercial and operations vice-presidency, led by engineer Germán García, through socio-environmental management in charge of Francisco Hernandez-Montoya, he structures policy proposals, plans and actions for managing climate change and water risk. The board is responsible for decision-making at corporate level in the Organization's climate change management, whose members analyze and approve actions in order to comply with the corporate strategy.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
All employees	Monetary reward	Other: Variable Compensation System	The Company has implemented the Variable Compensation System, which aims to improve the Organization's results through good performance of employees in carrying out the corporate and competitive strategy. This System rewards employees for good performance achievements by paying an annual bonus incentive which is not part of their salary. 10% of such remuneration corresponds to the performance of material sustainability issues, and metrics are established based on DJSI's scores. In 2014, the target was achieved and employees received, in 2015, 100% of remuneration. \$ 444,045,594 million was distributed in Celsia; while remuneration in EPSA was \$ 353,722,287. To improve DJSI performance, each department in charge establishes action plans for developing every material aspect, thus facilitating compliance with established goals.
All employees	Recognition (non-monetary)	Other: Participatory activity for emission calculation due to employees mobilization.	In order to encourage employees to take an active part in the management of climate change, a participatory activity for calculating Scope 3's emissions of the greenhouse gases inventory (in the item related to employees transport to the worksite). An invitation was extended to all employees to answer a specific survey conducted for calculating emissions. The company compensated emissions due to transportation in Scope 3, and as an incentive, a compensation certificate was issued to each employee who filled out the survey appropriately. The certificate was handed over to 112 Celsia employees and 452 EPSA employees, for a total of 316 tons of CO2eq

Further Information

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Sporadically, not defined	Senior manager/officer	Colombia (operation sites and stakeholders): Municipalities of Barranquilla, Barrancabermeja, Medellín, Valle del Cauca, Cauca, Tolima.	Unknown	Regarding climate risk management, it is integrated into the risk management process of the company, which consists of a homologous and systematic implementation of joint actions in the optimal management of risks that may affect the strategy and sustainability model, so that it may reasonably ensure compliance with its objectives. The integral management of cycle risk involves identification, measurement, control, monitoring, communication and disclosure of risks and action plans to minimize them. The risk management policy of the company defines that each area or process is integrated to risk management. However, through supporting risk management areas and the Financial Vicepresidency, this process is supported, methodologically. Accordingly, risks associated with climate change are identified from commercial and operations vicepresidency, in compliance with risk policy.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

Risk management is understood by the organization as a differentiating factor and a building block in achieving business sustainability. Integral risk management involves the systematic and approved implementation of a set of actions aimed at optimal management of risks that may affect the achievement of the strategic and tactical objectives. This management cycle includes identification, measurement, monitoring, communication and control measures in place to mitigate them.

Components designed to support the structure of the Integrated Risk Management System according to the strategic context of the organization have been defined, and these embody: the creation of a policy, risk analysis and assessment, and the establishment of a management culture. The organization has defined a Risk Management Policy which establishes the general framework for action in this area. This policy is part of the Integrated Management Risk System and it is further developed and supplemented with specific policies that may be established in relation to the businesses in which we participate. Additionally, it defines the following regime of responsibilities for managing and controlling risks:

Internal Audit performs control, provides feedback to the process and identifies new risks.

The Steering Committee ensures integrity of the Management System and safeguards strategic risks.

The Audit and Finance Committee of the Board oversees the identification of those events or situations that may affect the achievement of strategic objectives and effectiveness of risk management. It also monitors the measures taken to assess their suitability and compliance.

CC2.1c

How do you prioritize the risks and opportunities identified?

The organization performs a risk identification based on a qualitative and quantitative analysis, at both strategic and process level, which then supplements by the evaluation of established controls in order to prioritize inherent risks.

The analysis of each risk is addressed from several perspectives, looking for all strategic and public variables of interest to be covered. Different perspectives are used: economic, human management, reputational, environmental, social and market approaches.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment
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CC2.2

Is climate change integrated into your business strategy?

No

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

CC2.2b

Please explain why climate change is not integrated into your business strategy

Climate change is a new topic for the company, which requires historical information that the organization is beginning to compile and analyze to determine alignment and adjustments with the current strategy and how to operate in the future.

CC2.2c

Does your company use an internal price of carbon?

No, and we currently don't anticipate doing so in the next 2 years

CC2.2d

Please provide details and examples of how your company uses an internal price of carbon

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

- Direct engagement with policy makers
- Trade associations
- Funding research organizations

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Clean energy generation	Support	Celsia works proactively with guilds, participating in panel discussions for the law regulation, complying with one of the premises: "To influence national policies to reduce and offset greenhouse gas emissions in the electricity sector".	In 2014, Colombia Law 1715 on Non conventional Renewable Energies was approved, which regulates the integration of this kind of energy to the National Energy System.
Other: National Policy for Mitigation and Adaptation to Climate Change	Support	Celsia, participates as a member of the climate change board and the Colombian strategy of low carbon development (ECDDB) of the Ministry of Environment and Sustainable Development.	
Adaptation resiliency		Celsia is participating at the invitation of the Climate Change Office of the Ministry of Environment and Sustainable Development, in develop an adaptation to climate change based on communities statecraft (which are processes led by communities) that relies on priorities, needs, knowledge and skills in order to empower people to plan strategies facing the impacts of climate change, and to overcome them.	
Energy efficiency		"Development of the indicators model for smart networks to support decisions on policies, regulations and guidelines of the Colombian electricity system. This project is run by the Inter-American Development Bank (IDB) and the Mining and Energy Planning Unit (UPME). Analysis of maturity level models of smart electric networks and diagnosis of their status in five (5) companies, in conjunction with the Regional Energy Integration Commission (CIER) for Latin America."	Smartgrids - Definition of architectures and standards of technological development of the National Interconnected System.

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
ANDESCO (National Association of Companies for Utilities and Communications)	Consistent	The goals of ANDESCO are: To promote corporate and community environmental management under the principles of sustainability, understood as the right balance between environmental, social and economic aspects, in order to achieve Sustainable Development.	We participate, support and welcome initiatives that arise from the association in our role as partners and Board members.
ANDEG (National Association of Power Companies)	Consistent	ANDEG aims to propose and promote actions that contribute to National Government, Regulatory Committee, and Control and Supervisory authorities, to deepen the energy market. It also promotes the participation of associate companies in sectoral studies related to Climate Change and Sustainability as "energy policy objectives for a sustainable electricity market: Recovering efficient thermal generation for energy market" (http://www.andeg.org/node/25).	We participate, support and welcome initiatives that arise from the association in our role as partners and Board members.
ACOLGEN (Colombian Association of Electric Power Generators)	Consistent	The Colombian Association of Electric Power Generators has the fundamental objective of supporting and promoting programs, policies and/or actions aimed at ensuring the sustainable development of Colombian power generation industry. The following measures were taken by the association to contribute to these processes: • Active participation to design Policies and environmental regulations. • Proposals to ensure environment protection and sustainability of electricity's provision. • Support of activities and actions aimed at ensuring availability and protection of water resources. The association encourages companies in the sector to become a great protector of	We participate, support and welcome initiatives that arise from the association in our role as partners and Board members.

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
		biodiversity and other resources, including species threatened with extinction, and in actors that do not generate environmental liabilities to the planet. Likewise, the sustainable use of natural resources of the country for electricity generation is driven, while for coping with climate variability and vulnerability of water sources, the potential of other renewable and alternative energies such as wind, solar and geothermal sources are studied in order to ensure future supply and to maintain a low-carbon economy.	

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

Yes

CC2.3e

Do you fund any research organizations to produce or disseminate public work on climate change?

Yes

CC2.3f

Please describe the work and how it aligns with your own strategy on climate change

"Improving capacities and competitiveness of the productive chain of regional energy with Cluster Energy Network, made up of educational institutions such as: Universidad del Valle, Universidad Autónoma de Occidente, Cauca and SENA (National Learning and Training Service); energy agents as CETSA, Emcali, Compañía Energética de Occidente (CEO); suppliers of goods and services as Centelsa, GERS, ACIEM; and other strategic allies as the Chamber of Commerce of Cali, the Mayor's Office of Santiago de Cali and Asocaña.
 Technical and financial support to the following projects:

- High-voltage testing labs for characterization and analysis of Polychlorinated Biphenyls (PCBs) of transformers.
- Pilot of the Western Integrated Mass Transportation System (MIO), electric transportation.
- Energy worldwide competition: "Solar Decathlon".
- Analysis and development of bioenergy cluster initiative.
- Training of human resources in sustainable technologies.
- Program for renewable energy and sustainable mobility for suppliers.

These efforts align with the company's strategy in the socio-environmental Policy from the premise for Climate Change: "To research, develop and innovate on projects related to renewable technologies and carbon markets".

CC2.3g

Please provide details of the other engagement activities that you undertake

CC2.3h

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

The Board and the Environmental and Social Management permanently monitor activities undertaken by the organization seeking to comply with climate change policy. Within the next two (2) years, they will be establishing more formal procedures to follow up these activities.

CC2.3i

Please explain why you do not engage with policy makers

CC2.4

Would your organization's board of directors support an international agreement between governments on climate change, which seeks to limit global temperature rise to under two degree Celsius from pre-industrial levels in line with IPCC scenarios such as RCP2.6?

No opinion

CC2.4a

Please describe your board's position on what an effective agreement would mean for your organization and activities that you are undertaking to help deliver this agreement at the 2015 United Nations Climate Change Conference in Paris (COP 21)

Within the Company's Board, these issues have not been discussed.

Further Information

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?

No

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
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CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment
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CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
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CC3.1d

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
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CC3.1e

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

(i) In 2015, the company will analyze the results obtained from three (3) years measuring GHG inventories in order to determine if there is a possibility of establishing targets related to emissions intensity.

(ii) An increase in absolute emissions due to expansion projects and acquisitions of new thermal plants in Panama is expected. However, reductions in emissions

intensity (ton CO2e per MWh generated) as a result of the implementation of reduction initiatives and energy efficiency in different plants are expected.

CC3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

CC3.2a

Please provide details of how the use of your goods and/or services directly enable GHG emissions to be avoided by a third party

In 2014, Celsia and EPSA generated 56.3% of energy from renewable sources in their hydroelectric generation plants corresponding to 6,428 GWh, five (5) of our hydro power plants have CDM or VCS verification methodology for reducing emissions equivalent to 2,350,000 tons.

Additionally, our subsidiary EPSA signed a long-term contract for the sale of photovoltaic energy, estimating a generation of 5,630 MWh to prevent emissions of 2139 tCO2e into the environment during its term.

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*	4	135567.12
Implementation commenced*		
Implemented*	9	7682.9
Not to be implemented		

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Entry into operation of the combined cycle Flores IV in 2011. Similarly, we have obtained an improvement until 2013, for the stabilization of the cycle and the release for higher loads and energy saving programs initiated	1129.35	Scope 1	Voluntary					Annual monetary savings, investment required, payback period and estimated lifetime of the initiative were not estimated.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	in January 2013. Celsia had a reduction (in consumption of direct primary energy obtained from non-renewable sources) of 21748.28 GJ in Celsia's Free Trade Zone in auxiliary equipment, operation of recirculation water pump and speed drives in water plant.								
Low carbon energy installation	Installation of solar panels in the administrative headquarters of Yumbo in the second half of 2013, with a capacity of 61.64 kWp, serving about 5% of the building load. EPSA obtained a reduction of 18 GJ, with respect to the previous year, in the consumption of direct primary energy obtained from renewable sources.	50.2	Scope 2	Voluntary		1420000000			Annual monetary savings, investment required, payback period and estimated lifetime of the initiative were not estimated.
Energy efficiency: Building services	Projects focused on reducing consumption as a referent for responsible management were	3.31	Scope 2	Voluntary					The company executed the following activities: • Automation of central air conditioning system in its

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	developed at EPSA.								<ul style="list-style-type: none"> • administrative headquarters. • Implementation of energy efficiency program for the optimization of energy consumption in the building. • Lighting technology upgrade. • Installation of sensors to activate lighting by occupation in common areas such as meeting rooms, restrooms, coffee area, etc. • Substitution of air conditioning equipment with more efficient technologies, allowing that the operation of the building in 2013 ended with an energy consumption of 2,267,003 kWh/year, against the expected consumption of 2,284,258 kWh/year, generating an overall saving of 0.8%. Annual monetary savings, investment required, payback period and estimated lifetime of the initiative were not estimated.
Other	In connection with energy efficiency programs we develop with our customers, the company has been executing: •		Scope 3	Voluntary					Annual monetary savings, investment required, payback period and estimated lifetime of the initiative were not estimated.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	Delivery of 2,500 energy-saving bulbs to customers. • Remodeling of internal networks for 149 families. • Training for 6,071 users in efficient use of energy.								
Other	Program for Energy Resource Optimization (PORE)	283	Scope 3	Voluntary					We worked with six (6) non-regulated customers that had a total monthly consumption of 2.5 GWh, which was reduced by 9.5% for 0.24 GWh-month. Annual monetary savings, investment required, payback period and estimated lifetime of the initiative were not estimated.
Low carbon energy installation	Our subsidiary EPSA signed a long-term contract for the sale of photovoltaic energy, estimating a generation of 5,630 MWh to prevent the emission of 2130 tCO2e into the environment during its term.	2130	Scope 1	Voluntary					Annual monetary savings, investment required, payback period and estimated lifetime of the initiative were not estimated.
Fugitive emissions reductions	SF6 loss reduction	3055	Scope 1	Voluntary					EPSA trained 36 employees in best practices for preventive management of equipment, in order to minimize leakage of

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
									SF6. Additionally, activities aimed at preventing leaks on operational equipment were conducted. Annual monetary savings, investment required, payback period and estimated lifetime of the initiative were not estimated.
Low carbon energy installation	Estimation of emission reduction by small hydroelectric plants.	69954	Scope 2	Voluntary		20000000			The company performed the quantification of emission reductions and removals of Gases with greenhouse potential from small run-of-the-river hydroelectric plants in 2014. A total reduction of 69,954 tonnes of CO2 was estimated and verified by ICONTEC, reducing the GHG inventory of the organization from 1,478,542 tons to 1,408,588 tons CO2. For more information, please visit: http://bit.ly/1JM3Nt3 Annual monetary savings, payback period and estimated lifetime of the initiative were not estimated.
Low carbon energy installation	EPSA estimated that the development of the solar hybrid project for non-interconnected areas that	198	Scope 3	Voluntary					For further information, see integrated report on page 124: http://bit.ly/1HYSBc7 Annual monetary savings, investment

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	have an agreement with USAID, a reduction of 198 tons of CO2 is achieved.								required, payback period and estimated lifetime of the initiative were not estimated.

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	In 2014, Celsia invested COP 58,000,000 to innovation projects to develop energy efficiency through the pilot of Immotics and Domotics and automation of electric system and renewable energy in the administrative headquarters of EPSA in Yumbo, Valle.
Employee engagement	Celsia has two (2) electric vehicles that are provided to employees for use in the transportation from and to the company in order to replace the traditional means of transport and to reduce emissions due to transportation. The survey of transport habits of employees was also conducted to estimate emissions generated by mobilization to the workplace during 2014. These were offset by purchasing bonds of the restoration and reforestation of forests project in degraded areas in Caceres and Cravo Norte, Colombia. (http://thesouthpolegroup.com/public/projects/0658.pdf)
Dedicated budget for low carbon product R&D	Through the innovation model of the company, investment in research and implementation of renewable energy projects by 2014 are performed, including: River Microturbine and Solar Decathlon (COP 254,000,000), solar solution of Santa Barbara citadel (COP 541,000,000), electric transport (COP 46,000,000). View 2014 integrated report, pages 121- 123. http://bit.ly/1HYSBc7
Partnering with governments on technology	In 2014, we worked with the Mayor's Office of Cali and Asocaña in the pilot project of electric mass transportation (MIO), analysis and development of the bioenergy cluster initiative.

Method	Comment
development	

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

Page: CC4. Communication

CC4.1

Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Status	Page/Section reference	Attach the document
In voluntary communications	Complete	Integrated Report (2014) - pages 150 to 155 (http://www.celsia.com/sustainability/Reports) http://bit.ly/1HYSBc7	https://www.cdp.net/sites/2015/29/45029/Climate Change 2015/Shared Documents/Attachments/CC4.1/integrated-report-2014.pdf
In voluntary communications	Complete	Integrated Report (2013) - pages 129 to132 (http://www.celsia.com/sustainability/Reports) http://bit.ly/TrEi9n	https://www.cdp.net/sites/2015/29/45029/Climate Change 2015/Shared Documents/Attachments/CC4.1/RI_CELSIA_INGLES.pdf
In voluntary communications	Complete	Company website http://bit.ly/1JyXA06	

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
General environmental regulations, including planning	Possible changes in the regulation oriented to multipurpose reservoirs and restrictions on flows that are	Reduction/disruption in production capacity	1 to 3 years	Direct	Virtually certain	Medium-high	Analysis of financial implications has not been carried out.	Continuous monitoring of variables that may generate adverse regulatory changes for the company is executed in order to prevent and mitigate	Costs associated with risk management are related to travel and transportation for participation and attendance at events in all these

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	granted or renewed. Currently, Colombia has environmental regulation projects under evaluation aimed at changing ecological flow requirements, minimum level of reservoir operation, reservoir management plans, management of sediments.							its effects. Proactive work is also advancing with guilds, participating in panel discussions for the regulation of law.	initiatives. However, they have not been calculated.
Carbon taxes	Changes in energy regulation in Colombia adversely affecting the operation of assets, their profitability or business continuity: Colombia since 2012 in Rio +20 has been	Reduction/disruption in production capacity	1 to 3 years	Direct	Virtually certain	High	Celsia's direct GHG emissions amount to 1,424,644 t CO2/year. A carbon tax to direct emissions in Colombia may amount to COP 34,000 Million/year	Implementation of energy efficiency projects and emission reduction for hydroelectric plants which represents approximate savings of COP 4800 M and 9600 M/year.	The Costs related to the management of this risk are those associated with energy efficiency projects and costs of emission reduction verification: ICONTEC: COP 20 million Verification MDL, VCS : COP 50 million approx.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>promoting the creation of a carbon tax and it is also interested in participating in the OECD. According to the report "OECD Economic Studies. Colombia (OECD, 2015)", Colombia has few instruments to encourage better environmental performance and in this regard it recommends "implementing a carbon tax to deal with emissions in a cost-effective way".</p>						- COP 68,000 Million/year.		
Uncertainty surrounding new	Greater restrictions in terms of	Reduction/disruption in production capacity	3 to 6 years	Direct	Virtually certain	Medium	Analysis of financial implications	Continuous monitoring of variables that may	The costs associated with risk management are

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
regulation	energy intensity: In 2004 the Ministry of Mines and Energy endorses the statement 902 which commits the mining and energy sector with the reduction of carbon footprint.						has not been carried out.	generate adverse regulatory changes for the company is executed in order to prevent and mitigate its effects. Proactive work is also advancing with guilds, participating in panel discussions for the regulation of law and as member of the climate change board and the Colombian strategy of low carbon development (ECDBC) of the Ministry of Environment and Sustainable Development.	related to travel and transportation for participation and attendance at events in all these initiatives. However, they have not been calculated.
Product efficiency regulations and standards	Changes in energy regulation in Colombia adversely affecting the operation of assets, their profitability or business continuity: The Colombian	Reduced demand for goods/services	>6 years	Indirect (Client)	Likely	Medium-high	Analysis of financial implications has not been carried out.	Development of activities for improving processes, products and services to promote overall growth, achieve efficiency and ensure better market position. (See integrated report, page 120:	For 2014, the company's investment in innovation projects amounted to COP 7,014 million. COP 4,722 million from this value in the smart network project was invested. (For more information,

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>government, through the Ministry of Mines and Energy through Law 697 of 2011 commits the Rational and Efficient Use of Energy (URE) as a matter of social, public and national interest, essential to ensure the full and timely energy supply, competitiveness of the Colombian economy, consumer protection and promotion of the use of non-conventional energy in a sustainable way with the environment and natural resources. In addition, under</p>							<p>http://bit.ly/1HYSBc7).</p>	<p>visit page 123: http://bit.ly/1HYSBc7 2014 integrated report).</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Resolution 180919 of 2010, it adopted the Action Plan to develop the Program of Rational and Efficient Use of Energy and other forms of non-conventional energy. These government measures aimed at reducing electricity demand and further development of competitors who offer renewable energy.								

CC5.1b

Please describe your inherent risks that are driven by change in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitation extremes and droughts	Shorter and intense droughts or floods: Within the risks matrix of the Company, it has been identified that the current natural phenomena associated with climate change affects river levels (flows), which are used during operations. The stochastic modeling carried out in the context of this study, based in a standard 30-year series of rainfall records from several rivers in our country, suggests that climate change could limit the effective capacity of generation in all reservoirs. Reservoirs were classified	Reduction/disruption in production capacity	1 to 3 years	Direct	Likely	Medium-high	Analysis of financial implications has not been carried out.	To manage this risk, the organization has been associated with conservation and reforestation initiatives of strategic basins to its operations and it has taken steps to strengthen maintenance plans of the basins that feed the rivers providing water to plants. Watersheds, in which the economic benefits of conservation and restoration would be greater, are those in which the highest reductions in rainfalls and the biggest increases in variability are expected: Cauca, Pacifico, Antioquia 1 and Antioquia 2. Consequently, investments in the restoration and conservation of basins and	The costs have not been evaluated yet

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	according to the level of vulnerability to climate change in four (4) categories. It was found that the most vulnerable ones (Level 1 of Vulnerability) are: Pacífico, Cauca, Antioquia 1 and Antioquia 2, which coincide with the Organization's plants and projects.							ecosystems in these reservoirs are those which would generate the greatest economic benefits and those which would avoid greater expenses for energy sector.	
Induced changes in natural resources	Loss of water quality in reservoirs: The construction of a reservoir generates the transformation of a terrestrial ecosystem into an aquatic ecosystem, and the transformation of a river ecosystem into a lentic	Reduction/disruption in production capacity	>6 years	Direct	More likely than not	Low-medium	Analysis of financial implications has not been carried out.	The organization has decided not to establish action plans for this risk because it is not prioritized in the risk matrix.	The costs have not been evaluated yet

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	ecosystem, which leads to a reduction in the renewal rate and the water flow. One of the main consequences of the loss of quality in the reservoirs is eutrophication, which is the increase in organic matter. With regard to the operation, one of the main consequences of eutrophication is filter obstruction. Other consequences are lower species diversity, increase of macrophytes and mass of algae preventing light to pass, etc."								
Change in temperature extremes	Temperature problems in cooling units.	Increased operational cost	>6 years	Direct	About as likely as not	Low	Analysis of financial implications has not been	The organization has decided not to establish action plans for this risk	The costs have not been evaluated yet

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							carried out.	because it is not prioritized in the risk matrix.	
Change in mean (average) precipitation	Decrease of available water resource: A prospective study published by UPME and USAID identifies a temperature increase in Colombia, so rainfall will increase in some regions and decrease in others, which is caused by the topography variety and humidity currents in the air. The same study based on models determines a decrease between 6 and 8% of water sources in 2050.	Reduction/disruption in production capacity	>6 years	Direct	Very likely	High	As described on our water and climate change policy, the Organization is committed to develop a detailed analysis of financial implications of these conclusions on the business in the future, which justifies the decisions made. It is important to point out that a balanced generation infrastructure and a strategy for growth in alternative energies and cleaner technologies allows the Organization to structure	From the new business area, this risk is managed by seeking technological and hydrological complementarity to the generation mix, optimizing the mix between thermal, hydro generation and renewable energy for new businesses in which it penetrates. Additionally, when hydroelectric projects are evaluated, generation projections are made based on historical hydrological records.	The costs have not been evaluated yet

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							sustainable policies and market strategies		

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Induced changes in human and cultural environment	Stakeholder opposition against thermal projects. International activists are holding protests against the construction of power plants, because this increases greenhouse gases emissions and also causes health problems to people associated with particulate material emissions, carbon monoxide, sulfur oxides and nitrogen oxides.	Reduced demand for goods/services	>6 years	Direct	About as likely as not	High	Analysis of financial implications has not been carried out.	The organization has decided not to establish action plans for this risk because it is not prioritized in the risk matrix.	The costs have not been evaluated yet

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation

Opportunities driven by changes in physical climate parameters

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Voluntary agreements	We have identified opportunities related to climate change in the certification of projects under the CDM and VCS for an overall amount of 292.189 tonCO ₂ eq / year (currently not all projects are certified).	Increased demand for existing products/services	>6 years	Direct	Likely	Medium	At the moment, the possibility of carbon credit sale is not considered profitable given the ongoing decrease of the carbon market and the low cost of carbon credits (US \$ 0.17, which would represent an income of about US \$ 49,000).		

CC6.1b

Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	Celsia has identified business opportunities with the growth of its portfolio through the acquisition and development of renewable energy projects. Power generation from renewable sources has advantages, because they have lower emissions making them more respectful of the environment. Also, power generation allows energy autonomy. On the other hand, from the voluntary carbon markets, these projects may be included within schemes that allow the marketing of these bonds.	Increased production capacity	>6 years	Direct	About as likely as not	Medium	1. Financial implications have been estimated but they are confidential because they are projects in early evaluation. 2. It was found that the project is not financially viable after performing its evaluation.	1. It is currently evaluating five (5) projects for power generation with wind technology in Central and North America, which in total add about 470 MW and six (6) photovoltaic solar projects in Central America, totaling 165 MW. 2. A study for a wind (16MW) and solar (4 MW) project was performed with radiation, brightness and solar angle measurements, and characterization of winds at different heights through installed instruments on a 80-meter high mast in the municipality of Juan de Acosta about 45 kilometers west of Barranquilla.	1. Wind projects would involve an investment of around USD 950 million and solar projects would represent an investment of USD 300 million. 2. Approximately USD 650,000 were invested in the evaluation of this project.

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

At the moment, the risk assessment methodology of the company does not include the evaluation of opportunities related to climate change.

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Sun 01 Jan 2012 - Mon 31 Dec 2012	832138
Scope 2	Sun 01 Jan 2012 - Mon 31 Dec 2012	35013

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use

ISO 14064-1

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Fifth Assessment Report (AR5 - 100 year)
CH4	IPCC Fifth Assessment Report (AR5 - 100 year)
N2O	IPCC Fifth Assessment Report (AR5 - 100 year)
HFCs	IPCC Fifth Assessment Report (AR5 - 100 year)
PFCs	IPCC Fifth Assessment Report (AR5 - 100 year)
SF6	IPCC Fifth Assessment Report (AR5 - 100 year)

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Aviation gasoline	0.07046	metric tonnes	IPCC 2006 Guidelines for National Greenhouse Gas Inventories

Fuel/Material/Energy	Emission Factor	Unit	Reference
		CO2e per GJ	
Natural gas	0.05550	metric tonnes CO2e per GJ	FECOC (Emission factors for Colombian fuels) - UPME (Mining and Energy Planning Unit) - Ministry of Mines and Energy of the Republic of Colombia.
Diesel/Gas oil	0.07438	metric tonnes CO2e per GJ	FECOC (Emission factors for Colombian fuels) - UPME (Mining and Energy Planning Unit) - Ministry of Mines and Energy of the Republic of Colombia.
Motor gasoline	0.07503	metric tonnes CO2e per GJ	FECOC (Emission factors for Colombian fuels) - UPME (Mining and Energy Planning Unit) - Ministry of Mines and Energy of the Republic of Colombia.
Liquefied petroleum gas (LPG)	0.0657	metric tonnes CO2e per GJ	FECOC (Emission factors for Colombian fuels) - UPME (Mining and Energy Planning Unit) - Ministry of Mines and Energy of the Republic of Colombia.
Electricity	0.2	metric tonnes CO2e per MWh	XM Compañía de Expertos en Mercados S.A. ESP (operator of the National Interconnected System (SIN) and administrator of the Colombian Wholesale Energy Market (MEM))

Further Information

Page: CC8. Emissions Data - (1 Jan 2012 - 31 Dec 2012)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

832138

CC8.3

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

35013

CC8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of Scope 2 emissions excluded from this source	Explain why the source is excluded

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 5% but less than or equal to 10%	Data Management	For total calculation of uncertainty, a tool published by GHG Protocol, using aggregate statistics methods for estimating an uncertainty percentage based on the parameters of each inventory and the individual uncertainties of activity data and factors emission, is used. The emission factors used for calculating GHG inventory of Celsia are taken from official sources such as the Mining Energy Planning Unit of the Ministry of Environment in Colombia for fuels and IPCC for other emission sources. The uncertainty percentages made for each activity data and emission factors are taken from those generated by IPCC for the evaluation of uncertainty for national GHG inventories.
Scope 2	More than 5% but less than or equal to 10%	Other: Emission factor	Uncertainty in Scope 2 is associated with the annual emission factor of electricity used for calculating GHG inventory of Celsia. Scope 2 is taken from XM experts, operator of the energy market in Colombia who publishes the factor of national interconnected system each year in January and varies between 2% and 5%

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance complete

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
High assurance	https://www.cdp.net/sites/2015/29/45029/Climate Change 2015/Shared Documents/Attachments/CC8.6a/Certificacion Icontec 2012-2013.pdf	page 2	ISO14064-3	100

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

CC8.7

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

Third party verification or assurance complete

CC8.7a

Please provide further details of the verification/assurance undertaken for your Scope 2 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
High assurance	https://www.cdp.net/sites/2015/29/45029/Climate Change 2015/Shared Documents/Attachments/CC8.7a/Certificacion Icontec 2012-2013.pdf	page 2	ISO14064-3	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO₂e

1262320

CC8.3

Please provide your gross global Scope 2 emissions figures in metric tonnes CO₂e

38765

CC8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of Scope 2 emissions excluded from this source	Explain why the source is excluded
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CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 5% but less than or equal to 10%	Data Management	For total calculation of uncertainty, a tool published by GHG Protocol, using aggregate statistics methods for estimating an uncertainty percentage based on the parameters of each inventory and the individual uncertainties of activity data and factors emission, is used. The emission factors used for calculating GHG inventory of Celsia are taken from official sources such as the Mining Energy Planning Unit of the Ministry of Environment in Colombia for fuels and IPCC for other emission sources. The uncertainty percentages made for each activity data and emission factors are taken from those generated by IPCC for the evaluation of uncertainty for national GHG inventories.
Scope 2	More than 5% but less than or equal to 10%	Other: Emission factor	Uncertainty in Scope 2 is associated with the annual emission factor of electricity used for calculating GHG inventory of Celsia. Scope 2 is taken from XM experts, operator of the energy market in Colombia who publishes the factor of national interconnected system each year in January and varies between 2% and 5%.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance complete

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
High assurance	https://www.cdp.net/sites/2015/29/45029/Climate Change 2015/Shared Documents/Attachments/CC8.6a/Certificacion Icontec 2012-2013.pdf	page 2	ISO14064-3	100

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
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CC8.7

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

Third party verification or assurance complete

CC8.7a

Please provide further details of the verification/assurance undertaken for your Scope 2 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
High assurance	https://www.cdp.net/sites/2015/29/45029/Climate Change 2015/Shared Documents/Attachments/CC8.7a/Certificacion Icontec 2012-2013.pdf	page 2	ISO14064-3	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

Page: CC8. Emissions Data - (1 Jan 2014 - 31 Dec 2014)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

1424644

CC8.3

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

53898

CC8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of Scope 2 emissions excluded from this source	Explain why the source is excluded
All emission sources outside Colombia	Emissions excluded due to a recent acquisition	Emissions excluded due to a recent acquisition	In 2014 an asset in Panama, which is still not included in the inventories calculated from the base year to the reporting year since it began operations on December 1, 2014, was acquired.

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 5% but less than or equal to 10%	Data Management	For total calculation of uncertainty, a tool published by GHG Protocol, using aggregate statistics methods for estimating an uncertainty percentage based on the parameters of each inventory and the individual uncertainties of activity data and factors emission, is used. The emission factors used for calculating GHG inventory of Celsia are taken from official sources such as the Mining Energy Planning Unit of the Ministry of

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
			Environment in Colombia for fuels and IPCC for other emission sources. The uncertainty percentages made for each activity data and emission factors are taken from those generated by IPCC for the evaluation of uncertainty for national GHG inventories.
Scope 2	More than 5% but less than or equal to 10%	Other: Emission factor	Uncertainty in Scope 2 is associated with the annual emission factor of electricity used for calculating GHG inventory of Celsia. Scope 2 is taken from XM experts, operator of the energy market in Colombia who publishes the factor of national interconnected system each year in January and varies between 2% and 5%.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance complete

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
High assurance	https://www.cdp.net/sites/2015/29/45029/Climate Change 2015/Shared Documents/Attachments/CC8.6a/Declaraci3n CELSIA - Ingles 2014.pdf	page 2	ISO14064-3	100

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
------------	--------------------------------------	-------------------	------------------------

CC8.7

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

Third party verification or assurance complete

CC8.7a

Please provide further details of the verification/assurance undertaken for your Scope 2 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
High assurance	https://www.cdp.net/sites/2015/29/45029/Climate Change 2015/Shared Documents/Attachments/CC8.7a/Declaración CELSIA - Ingles 2014.pdf	page 2	ISO14064-3	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Emissions reduction activities	At Celsia, ICONTEC International verified VCS bonds of Hidromontañas plant. Available on: http://bit.ly/1Km5JFw . See Issuance Documents. Verification Report: VERIF_REP_1206_16JUN2012_30JUN2014.pdf

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

Attachments

[https://www.cdp.net/sites/2015/29/45029/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC8.EmissionsData\(1Jan2014-31Dec2014\)/VCSVerificationReport_Montañas.pdf](https://www.cdp.net/sites/2015/29/45029/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC8.EmissionsData(1Jan2014-31Dec2014)/VCSVerificationReport_Montañas.pdf)

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2012 - 31 Dec 2012)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

No

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

- By business division
- By facility
- By GHG type

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
Celsia	827950
EPSA	4188

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Celsia Headquarters	102.8	6.201864	-75.572752
Zona Franca Celsia (Thermal power plant)	747074.5	11.026252	-74.812438
Merilectrica (Thermal power plant)	80770.8	7.054481	-73.820291
Minor Hydroelectric Power Plants	1.7	6.563626	-75.285058
EPSA	4187.9	3.516640	-76.500389

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	827054
CH4	1937.6
N2O	543.9

GHG type	Scope 1 emissions (metric tonnes CO2e)
HFCs	117.1
PFCs	0
SF6	2485.2

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)

CC9.2e

Please break down your total gross global Scope 1 emissions by legal structure

Legal structure	Scope 1 emissions (metric tonnes CO2e)

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2013 - 31 Dec 2013)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

No

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
----------------	----------------------------

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

- By business division
- By facility
- By GHG type

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
-------------------	--

Business division	Scope 1 emissions (metric tonnes CO2e)
Celsia	1259607.3
EPSA	2712.7

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Celsia Headquarters	103.9	6.201853	-75.572762
Zona Franca Celsia (Thermal power plant)	1126904.	11.026252	-74.812438
Merilectrica (Thermal power plant)	132583.3	7.054481	-73.820291
Minor Hydroelectric Power Plants	16	6.563626	-75.285058
EPSA	2712.7	3.516640	-76.500389

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	1257599.8
CH4	2937.9
N2O	816.3

GHG type	Scope 1 emissions (metric tonnes CO2e)
HFCs	102.6
PFCs	0
SF6	863.4

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)

CC9.2e

Please break down your total gross global Scope 1 emissions by legal structure

Legal structure	Scope 1 emissions (metric tonnes CO2e)

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2014 - 31 Dec 2014)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

No

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
----------------	----------------------------

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

- By business division
- By facility
- By GHG type

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
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Business division	Scope 1 emissions (metric tonnes CO2e)
Celsia	1421742
EPSA	2902

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Celsia Headquarters	746.8	6.201853	-75.572762
Zona Franca Celsia (Thermal power plant)	1240774.1	11.026252	-74.812438
Merilectrica (Thermal power plant)	180211.5	7.054481	-73.820291
Minor Hydroelectric Power Plants	9.3	6.563626	-75.285058
EPSA	2901.9	3.516640	-76.500389

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	1419016.3
CH4	3623.7
N2O	733.9

GHG type	Scope 1 emissions (metric tonnes CO2e)
HFCs	7.1
PFCs	0
SF6	1262.7

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)

CC9.2e

Please break down your total gross global Scope 1 emissions by legal structure

Legal structure	Scope 1 emissions (metric tonnes CO2e)

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2012 - 31 Dec 2012)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

No

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)
----------------	----------------------------	--	--

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division
By facility

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions (metric tonnes CO2e)
Celsia	3771.4

Business division	Scope 2 emissions (metric tonnes CO2e)
EPSA	31241.7

CC10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
Celsia Headquarters	88.1
Zona Franca Celsia (Thermal power plant)	3464.1
Merilectrica (Thermal power plant)	216.2
Minor Hydroelectric Power Plants	2.9
EPSA	31241.7

CC10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
----------	--

CC10.2d

Please break down your total gross global Scope 2 emissions by legal structure

Legal structure	Scope 2 emissions (metric tonnes CO2e)
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Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2013 - 31 Dec 2013)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

No

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)
----------------	----------------------------	--	--

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division
By facility

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions (metric tonnes CO2e)
Celsia	4130.3
EPSA	34634.7

CC10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
Celsia Headquarters	159
Zona Franca Celsia (Thermal power plant)	3644.9
Merilectrica (Thermal power plant)	321.7
Minor Hydroelectric Power Plants	4.6
EPSA	34634.7

CC10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
----------	--

CC10.2d

Please break down your total gross global Scope 2 emissions by legal structure

Legal structure	Scope 2 emissions (metric tonnes CO2e)
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Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2014 - 31 Dec 2014)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

No

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)
----------------	----------------------------	--	--

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division
By facility

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions (metric tonnes CO2e)
Celsia	4134.8
EPSA	49763.3

CC10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
Celsia Headquarters	133.3
Zona Franca Celsia (Thermal power plant)	3697.6
Merilectrica (Thermal power plant)	296
Minor Hydroelectric Power Plants	7.8
EPSA	49763.3

CC10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)

CC10.2d

Please break down your total gross global Scope 2 emissions by legal structure

Legal structure	Scope 2 emissions (metric tonnes CO2e)

Further Information

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

CC11.2

Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Fuel	7031711
Electricity	33337
Heat	
Steam	
Cooling	

CC11.3

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Aviation gasoline	476
Diesel/Gas oil	122630
Motor gasoline	4864
Natural gas	6903594
Propane	147

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the Scope 2 figure reported in CC8.3

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	In Colombia the energy generated enters into an interconnected system where electricity from different sources (hydro, thermal, minor sources, solar, etc.) is mixed. In 2014, the percentage of generation coming from renewable sources was 65%.

Further Information

Page: **CC12. Emissions Performance**

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Increased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions	0	No change	

Reason	Emissions value (percentage)	Direction of change	Comment
reduction activities			
Divestment	0	No change	
Acquisitions	0	No change	
Mergers	0	No change	
Change in output	0	No change	
Change in methodology	0	No change	
Change in boundary	0	No change	
Change in physical operating conditions	0	No change	
Unidentified	0	No change	
Other	14	Increase	Because of the way the Colombian Energy Market operates, the activity of thermal power plants increased in recent years. During drought periods in Colombia, energy market allows entry into operation of thermal power plants to meet demand, which is why the organization has had a significant increase from 2012, and this is an aspect that is not under the company's control since it depends on the hydrological availability of the country.

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
------------------	------------------	--------------------	-----------------------------	--	-------------------

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.5711	metric tonnes CO2e	unit total revenue	4.47	Increase	Although company's revenues increased during 2014, absolute emissions also increased due to hydrological phenomena presented in Colombia that year and because of the consequent increase in demand for generation by thermal power plants.

CC12.3

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
1056.1	metric tonnes CO2e	FTE employee	12.5	Decrease	During 2014, the number of employees increased by almost 30% compared to 2013 due to organizational structure requirements.

CC12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.23	metric tonnes CO2e	megawatt hour (MWh)	8.93	Increase	Although company's revenues increased during 2014, absolute emissions also increased due to hydrological phenomena presented in Colombia that year and because of the consequent increase in demand for generation by thermal power plants, so this year, they had a greater contribution to the generation matrix of the company than in previous years.

Further Information

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit Origination	Hydro	1206: MONTANITAS HYDROELECTRIC PROJECT	VCS (Verified Carbon Standard)	478670		No	Voluntary Offsetting
Credit Origination	Hydro	2600: Amaime Minor Hydroelectric Power Plant	CDM (Clean Development Mechanism)	209971		No	Voluntary Offsetting
Credit Origination	Hydro	3570 : Alto Tuluá Minor Hydroelectric Power Plant	CDM (Clean Development Mechanism)	280434		No	Voluntary Offsetting
Credit Origination	Hydro	3599 : Bajo Tuluá Minor Hydroelectric Power Plant	CDM (Clean Development Mechanism)	290010		No	Voluntary Offsetting
Credit Origination	Hydro	9830: Cucuana Hydroelectric Power Plant	CDM (Clean Development Mechanism)	617750		No	Voluntary Offsetting
Credit	Hydro	1173: SAN ANDRES	VCS (Verified Carbon	437170		No	Voluntary

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Origination		HYDROELECTRIC PROJECT	Standard)				Offsetting

Further Information

Page: **CC14. Scope 3 Emissions**

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Not relevant, calculated	557	GHG Protocol- Corporate value chain (scope 3) accounting and reporting standard. Emission factor of Ecoinvent 2.2: paper, newsprint, at plant [CH]	100%	6 tons of CO2e are quantified by purchasing paper in administrative activities of different Celsia and EPSA's sites. EPSA donates fuel to the army. Within the accounting of the company, this fuel appears as a purchase, but not used for the operation, it is

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					donated to the army, who uses it for its activities so that it is included in this category. Whereas the army indirectly provides a monitoring and safety service to facilities of some of the plants and facilities located in vulnerable areas, emissions associated with donated fuel are located above the organization (emissions along the existence of the company) in the modality of service. For this purpose, 551.02 tons of CO2e were estimated."
Capital goods	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	34549.9	GHG Protocol- Corporate value chain (scope 3) accounting and reporting standard: To calculate emissions by extraction of each type of fuel, emission factors of Ecoinvent 2.2 were used for the following activities: diesel, low-sulphur, at regional storage [RER], petrol, 5% vol. ethanol, from biomass, at service station [CH], liquefied petroleum gas, at service station [CH], natural gas, high pressure, at consumer [CH].	100%	Fuel extraction in Scope 1 and 3. Total quantities of fuels consumed both in thermal power generation and own and rented vehicles were included. Of total emissions in this category, 83% of them are associated with the extraction of Natural Gas for heat generation in generating plants.
Upstream transportation and distribution	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
Waste generated in operations	Relevant, calculated	313.5	GHG Protocol- Corporate value chain (scope 3) accounting and reporting standard. Emission factors of Ecoinvent 2.2; for disposal (disposal, municipal solid waste, 22.9% water, to sanitary	100%	Celsia has a program to manage solid waste with sorting at source that is carried out within each of the facilities. This category includes quantified emissions associated with the

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			landfill [CH], disposal, municipal solid waste, 22.9% water, to municipal incineration [CH], disposal, hazardous waste, 0% water, to underground deposit [DE]) and for waste transport (transport, municipal waste collection, lorry 21t [CH], transport, lorry >32t, EURO3 [RER]). Amounts of ordinary and hazardous wastes are recorded for each installation from the environmental management system of the company, and these values are applied to emission factors named according to the disposal method used and distances to quantify emissions from transport to the disposal site that were reported for each of the facilities included in the limits.		disposal of 459.4 tonnes of ordinary waste, 43.87 tons of hazardous waste for incineration and 23.42 tons of hazardous waste to be disposed in secure landfill.
Business travel	Relevant, calculated	1152.6	GHG Protocol- Corporate value chain (scope 3) accounting and reporting standard. This category includes business flights for Celsia and EPSA and fuel for rented vehicles operated by third parties for business transport services. To calculate emissions associated to business flights, purchasing records of tickets on commercial flights by 2014 were recovered from the shopping area, and emissions were evaluated in the carbon calculator icao.int (International Civil Aviation Organization) for each distance traveled. For emissions from outsourced transport, service provider reports the fuel used per trip to the	50%	Of total emissions estimated in this category, 49.8% corresponds to corporate flights and 50.1% to emissions from outsourced transport services in EPSA. Records of Celsia's transportation providers could not be recovered and they were not included in the estimation of the latter topic.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			organization for calculation purposes. For other services such as taxi, an estimate of fuel per number of trips and average travel distance is performed. For the calculation of 2014, the corresponding fuel to EPSA's third-parties vehicles are included (other than Renting), inter-company vehicles, taxis, boats and rented boats (used in operating plants with reservoirs) and rented vehicles of administrative areas.		
Employee commuting	Relevant, calculated	473.6	For collecting data used in calculations in this category, surveys about transportation habits of employees of both organizations, and specifically tailored to the distance and location of the different sites to which employees must travel daily, were developed. Surveys were conducted by 122 partners of Celsia and 464 collaborators of EPSA representing 42% of all employees in the organization. These surveys were analyzed to determine distances and modes of transport used (including taxi, private car, bus, mass transit systems and bike). Moreover, EPSA implemented a program of "recognized kilometers" (to employees who use their own car for mobilization because of activities related to their work functions), which covers their fuel recorded per mileage by each of the employees under this system.	50%	Over the coming years we expect to obtain data in the survey of travel habits from a higher percentage of employees of the organization in order to quantify emissions in this category up to 100%
Upstream leased assets	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Downstream transportation and distribution	Not evaluated	0		0%	them in future calculations. By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
Processing of sold products	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
Use of sold products	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
End of life treatment of sold products	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
Downstream leased assets	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
Franchises	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
Investments	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
Other (upstream)	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.
Other (downstream)	Not evaluated	0		0%	By 2014 emissions were not estimated in this category, however it shall be deemed to include them in future calculations.

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

No third party verification or assurance

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of Scope 3 emissions verified (%)

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Employee commuting	Change in boundary	60	Increase	In 2014 a larger number of people in the survey of transport habits of employees was included. Additionally, for the first time, emissions in the mode of kilometers traveled, recognized by the company with regard to EPSA's employees, who use their own vehicle to perform various activities related to their functions, were included.
Purchased goods & services	Change in boundary	21	Increase	Although emissions by purchasing paper remained similar to the previous year, donations of fuels increased in 2014.
Waste generated in operations	Change in boundary	98	Increase	In 2014, for the first time, emissions for waste transport to the final disposal site were included.
Business travel	Change in boundary	111	Increase	An increase recorded both in the number of business flights and fuel for transport services hired by the company was noticed.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

As part of the commitment to our areas of influence, during 2014 we made the selection of 231 new suppliers and bonding of 127, all belonging to the regions where we operate, strengthening support ties and generating more strategic partners. Purchases from these companies amounted to \$ 7,145 million.

Similarly, activities focused on the development of suppliers to generate an awareness of sustainability have been executed, so this year 130 suppliers attended and 74 of them participated in the sustainability assessment, which takes place in two (2) phases:

1. Completion of the questionnaire to identify their social, environmental and human rights practices and generating a report with the main findings in terms of strengths, risks and opportunities for improvement.
2. Selection of 30 critical suppliers to audit information reported by them in the survey in order to identify their degree of progress on the way towards sustainability and to define action plans and to follow them. This phase will take place in 2015.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend	Comment
74	3.10%	Celsia started the first sustainability assessment exercise to its suppliers, where assessment of the management of Greenhouse Gases is included. Results will be used to plan support actions to suppliers. A total of 294 suppliers were invited to join, from which 74 responded to the survey, whose results were reported in the first quarter of 2015.

CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Use in supplier scorecards	In addition to recruitment policies, as part of monitoring and to ensure that suppliers support and strengthen the management on the economic, environmental and social issues, the organization conducts a risk analysis, both in the supplier's purchase and performance, focused on minimizing potential impacts through performance evaluation of suppliers based on the criteria of quality, service fulfillment, Environment, Health and Safety at Work.

CC14.4d

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information**Module: Sign Off****Page: CC15. Sign Off**

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Francisco Hernandez-Montoya	Environmental and Social Manager	Environment/Sustainability manager

Further Information**Module: Electric utilities****Page: EU0. Reference Dates**

EU0.1**Reference dates**

Please enter the dates for the periods for which you will be providing data. The years given as column headings in subsequent tables correspond to the "year ending" dates selected below. It is requested that you report emissions for: (i) the current reporting year; (ii) one other year of historical data (i.e. before the current reporting year); and, (iii) one year of forecasted data (beyond 2019 if possible).

Year ending	Date range
-------------	------------

Year ending	Date range
2014	Wed 01 Jan 2014 - Wed 31 Dec 2014
2013	Tue 01 Jan 2013 - Tue 31 Dec 2013
2021	Fri 01 Jan 2021 - Fri 31 Dec 2021

Further Information

Page: EU1. Global Totals by Year

EU1.1

In each column, please give a total figure for all the countries for which you will be providing data for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emission intensity (metric tonnes CO2e/MWh)
2014	2312	6437	1478542	0.230
2013	1777	6170	1301085	0.211
2021	2724	7996	2314249	0.289

Further Information

Page: EU2. Individual Country Profiles - Colombia

EU2.1

Please select the energy sources/fuels that you use to generate electricity in this country

Oil & gas (excluding CCGT)
CCGT
Hydro

EU2.1a

Coal - hard

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)

EU2.1b

Lignite

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)

EU2.1c**Oil & gas (excluding CCGT)**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
2014	167	267	180508	0.676
2013	167	202	132905	0.658

EU2.1d**CCGT**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
2014	610	2548	1244472	0.488
2013	610	2474	1130549	0.457

EU2.1e**Nuclear**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)

EU2.1f

Waste

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

EU2.1g

Hydro

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2014	1118	3620
2013	1000	3494

EU2.1h**Other renewables**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
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EU2.1i**Other**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
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EU2.1j**Solid biomass**

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
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EU2.1k

Total thermal including solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	777	2815	1424979	0.506
2013	777	2676	1263454	0.472

EU2.1l

Total figures for this country

Please enter total figures for this country for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes in CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
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Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes in CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	1895	6435	1477662	0.230
2013	1777	6170	1300822	0.211

Further Information

Page: EU3. Renewable Electricity Sourcing Regulations

EU3.1

In certain countries, e.g. Italy, the UK, the USA, electricity suppliers are required by regulation to incorporate a certain amount of renewable electricity in their energy mix. Is your organization subject to such regulatory requirements?

No

EU3.1a

Please provide the scheme name, the regulatory obligation in terms of the percentage of renewable electricity sourced (both current and future obligations) and give your position in relation to meeting the required percentages

Scheme name	Current % obligation	Future % obligation	Date of future obligation	Position in relation to meeting obligations

Further Information

Page: EU4. Renewable Electricity Development

EU4.1

Please give the contribution of renewable electricity to your organization's EBITDA (Earnings Before Interest, Tax, Depreciation and Amortization) in the current reporting year in either monetary terms or as a percentage

Please give:	Monetary figure	%	Comment
Renewable electricity's contribution to EBITDA			

EU4.2

Please give the projected contribution of renewable electricity to your organization's EBITDA at a given point in the future in either monetary terms or as a percentage

Please give:	Monetary figure	%	Year ending	Comment
Renewable electricity's contribution to EBITDA				

EU4.3

Please give the capital expenditure (capex) planned for the development of renewable electricity capacity in monetary terms and as a percentage of total capex planned for power generation in the current capex plan

Please give:	Monetary figure	%	End year of capex plan	Comment
Capex planned for renewable electricity development				

Further Information

CDP