Investor CDP 2014 Information Request
Iren SpA

Module: Introduction

Page: Introduction

CC0.1
Introduction
Please give a general description and introduction to your organization.

IREN was set up on the 1st July 2010 through the merger of Enìa and Iride and is at the top in the Italian multi-utilities sector occupying a leading position in its business areas, a balanced mix of regulated activities and free activities and a close integration between upstream and downstream activities. Due to its production assets, its past and present investments, its position in all business areas, in all phases in the energy chain, and its roots within the country, IREN is now one of the main Multi-utilities Groups on the Italian scene.
The IREN Group operates in the following sectors: electricity, gas, district heating, integrated water service and waste, and it also provides technological services (telecommunications, public lighting, traffic light services, facility management). The Iren Group operates with a diversified business model, characterized by a mix of profits between free activities (35%) and regulated activities (65%), which guarantees solidity, development prospects and reduced risk levels. IREN is one of the main examples in Italy of multiutilities oriented towards the provision of services and creation of infrastructure for enriching and enhancing the country, in respect of the environment and the customers. The Group serves a multiregional area with over 7,000,000 inhabitants, with its about 4,500 employees, a Gross Operating Margin of 646 million euros in 2013, a portfolio of more than 1.4 million customers in the energy sector and over 2.4 million inhabitants served in the water service and 1.2 million inhabitants in the waste management.

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
Tue 01 Jan 2013 - Tue 31 Dec 2013

CC0.3
Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response.

Select country
Italy

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.

EUR(€)

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 sectors, companies in the oil and gas industry, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco sectors should complete supplementary questions in addition to the main questionnaire.
If you are in these sectors (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

Attachments

https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC0.Introduction/Struttura del Gruppo 2013.jpg
https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC0.Introduction/Assetto organizzativo 2013.jpg

Module: Management

Page: CC1. Governance

CC1.1

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

Individual/Sub-set of the Board or other committee appointed by the Board

CC1.1a
Please identify the position of the individual or name of the committee with this responsibility

Climate change issues are strategic for Group businesses and therefore related topics are discussed at the highest levels of the organization within the Board of Directors. This body controls Environmental policies and updates strategic plans connected with sustainable development and climate change.

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
Business unit managers	Monetary reward	Incentives of many Iren Group employees (from different departments/units and different levels) are linked to projects with significant environmental and GHG emissions benefits (e.g. district heating, design and implementation of hydroelectric plants, reduction of the number of vehicles not used for industrial purposes, feasibility study on the exploration of the potential for market linked to mobility with electric cars, reduction of natural gas required for heating purification plant's sludge, renewal of the gas distribution network and leakages's reduction, energy optimization of buildings managed by the Group).
Energy managers	Monetary reward	Incentives of many Iren Group employees (from different departments/units and different levels) are linked to projects with significant environmental and GHG emissions benefits (e.g. district heating).
Public affairs managers	Monetary reward	Incentives of many Iren Group employees (from different departments/units and different levels) are linked to projects with significant environmental and GHG emissions benefits (e.g. district heating).
Other: Legal managers	Monetary reward	Incentives of many Iren Group employees (from different departments/units and different levels) are linked to projects with significant environmental and GHG emissions benefits (e.g. district heating).
Other: Procurement managers	Monetary reward	Incentives of many Iren Group employees (from different departments/units and different levels) are linked to projects with significant environmental and GHG emissions benefits (e.g. district heating).

Further Information

Attachments

https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC1.Governance/Assetto organizzativo 2013.jpg

Page: CC2. Strategy

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
Six-monthly or more frequently	Individual/Sub-set of the Board or committee appointed by the Board	Italy	1 to 3 years	In the ERM model of Iren Group, the most relevant financial, commodity, operational and reputational risks are managed. Three-monthly the Group risk map is updated; risks are evaluated in terms of frequency, severity, actual level of control, management actions and residual risks. In particular, the risks linked to natural catastrophes, pollution and droughts are among our top 20 risks.

CC2.1b
Please describe how your risk and opportunity identification processes are applied at both company and asset level

At a company level, an assessment process is active, in which owners are required to map and evaluate their inherent risks, controls and residual risks, according to the company standards/policies. All the risks are merged and integrated for the whole Group.
At an asset level, Risk assessment is made for the main Group facilities, for plant damage and business interruption, and it is updated once a year. The information is also used to aid Risk Management in customizing the insurance program.

CC2.1c
How do you prioritize the risks and opportunities identified?

We prioritize the risks identified on the base of risk value (frequency*severity) in terms of medium-term enterprise value. Financial, operational and reputational impacts are taken into account within this evaluation.

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

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

i. How the business strategy has been influenced, i.e. the internal communication/reporting processes that achieve this.
Climate changes have been taken in account for the specific issues related to the Group production system. The main processes involved in achieving the goal consider climate changes in the company strategies in the Strategic Plan definition.
ii. What climate change aspects have influenced the strategy, e.g. how the strategy is linked to the risks and opportunities and emissions reduction targets (requested in subsequent sections of the information request).
Climate change directly influences energy business. The main climate changes aspects influencing Iren Group strategy are: average and extreme temperatures and the level of precipitations. Another aspect relevant for Iren business is emissions reduction targets, mainly linked to mandatory requirements issued by regulators.
Iren Group strategy therefore considers not only the risks linked to climate change but also the related opportunities (e.g. energy efficiency services, renewable energy, etc.)
iii. The most important components of the short term strategy that have been influenced by climate change (e.g. changes in operational practices, changing the way business is communicated, etc.). If climate change has only affected the long term strategy, this should be stated.
The most important component of short term strategy that has been influenced by climate change is thermoelectric plant operation, which is strictly related to energy needs from consumers and incentive and emission trading systems.
iv. The most important components of the long term strategy that have been influenced by the climate change (e.g. changing core business focus, development and incorporation of new technologies, etc.). In the less likely event that climate change has only affected the short term strategy, this should be stated.
The most important component of long term strategy that has been influenced by climate change is the structure of production mix of the Group (CHP, hydro with pumping plants, etc.).
v. How this is gaining you strategic advantage over your competitors.
Production mix of the Group can be better exploited than competitors (higher level of operation hours), because the main plants are low CO2 emitting.
vi. What have been the most substantial business decisions made during the reporting year that have been influenced by the climate change driven aspects of the strategy (e.g. investment, location, procurement, M&A, R&D). Both the business decision and the aspect of climate change that has influenced the business decision must be made clear in the answer. If there are none to report, this should be stated.
1) The strategic approach pursued in 2013 shows a continuous attention to the climate change issues. In particular, the Group is focused on delivering services and on the creation of infrastructure aimed to reduce environmental impact, in terms of energy consumption and GHG emissions:
- following the acquisition of the AIA (Autorizzazione Integrata Ambientale) authorization the Group has started the activities of the WTE Polo Ambientale Integrato in Parma, a co-generation plant connected to the district heating network. The AIA authorization predicted emission limits lower than those required by the applicable national and European regulations;
- Further development / expansion of the district heating network (network extension, construction of heat accumulators in Turin, research activities in collaboration with the University);
- Enhancing power generation capacity: a) With the completion of the operation that caused the exit of Iren Group from the Edipower's ownership (with effect from 1 November 2013), Iren Energia took part in the property of Turbigo, the combined-cycle thermal power plant and Tusciano, the hydroelectric plant b) participation, with the F2i found, in the implementation and management of WTE in the province of Turin (managed by TRM S.p.A.) c) the development of mini - hydro projects and the expansion of hydroelectric and solar plant's capacity and production.
2) The Group continued in 2013 research and development activities primarily aimed to develop academic research projects mainly oriented to participation in European research projects in areas of strategic interest (Smart Grid, Smart City, etc.) also in collaboration with Politecnico of Turin, University of Turin, University of Manchester, the city of Turin, the city of Reggio Emilia, french, danish, and spanish utilities, Centre of Research (Fiat, etc.), Italian and European SME, etc. and assess opportunities associated to the use of innovative technologies. In particular: a) DIMMER: The project, involves the development of effective web interfaces that provide feedback in real time related to the energy impact of user behaviour at a neighborhood level.b) EMPOWERING: The research project aims to "empower" the end user to save energy through "smart" information which can be read by the user on smart meters and on more simple and personalized energy bills.c) FABRIC (Feasibility analysis and development of on-road charging solutions for future electric vehicles): The project aims to the develop of a charging system for electric cars moving through inductive coils embedded in the concrete road.
3) During 2013, Iren Acqua Gas participated in a research and development project named "PREPARED" aimed at defining global strategies finalized to reduce the impact of climate change related to integrated water cycle. The knowledge, experience and technology assets of the partnership in different European countries, will be made for the common factor development of innovative solutions applied by management companies in the sample sites.
4) In order to improve energy efficiency, in 2013 the Group has continued the analysis to obtain the UNI CEI EN 50001 on Energy Management Systems and, as preparatory activities, has conducted a systematic study on energy consumption within the Group. To spread the culture of savings and energy efficiency, the Group has continued a project of corporate communication related to energy efficiency through the local intranet.

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
Energy efficiency	Support	Direct cooperation with the Municipal Government of Parma, Piacenza and Reggio Emilia to the definition of Municipal Energy Plans (Law Jan. 9, 1991, n. 10: Standard for the Implementation of the National Energy Plan in the field of rational use of energy, energy conservation and development of renewable sources of energy)	The Iren Group is committed to support the legislation without exceptions
Clean energy generation	Support	Direct cooperation with the Municipal Government of Parma, Piacenza and Reggio Emilia to the definition of Municipal Energy Plans (Law Jan. 9, 1991, n. 10: Standard for the Implementation of the National Energy Plan in the field of rational use of energy, energy conservation and development of renewable sources of energy)	The Iren Group is committed to support the legislation without exceptions

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?
FederUtility	Consistent	The Italian federation which brings together the local public utility companies of the water and energy sectors, and government bodies in national, European and global. The objectives of FederUtility, among others, are: promotion of measures designed to give effect to the principles and the national regulations and European Union for the environmental improvement, promotion of legislative initiatives related to the water and energy sector (electricity, gas, district heating), the representation of the associated organs in the European Parliament, the European Commission and other European bodies.	Participation in committees and working groups. The CEO of Iren is a member of the Presidential Committee, the Board of Directors and of the Permanent Commission of Electricity FederUtility (Federation of Energy and Water Companies).
Federambiente	Consistent	The Italian industry association for companies operating in the waste management sector. The objectives of Federambiente, among others, are: to promote the development of the system of general services in the environmental sector, promote environmental education through the recruitment of initiatives aimed at the improvement of the legal provisions on services of general economic in order to improve the legal system and to facilitate the technical and managerial development carrying out activities of study, training and consulting, represent the Associates in national and international trade associations.	Participation in Board of Directors, committees and working groups.
Confservizi	Consistent	Italian industry association for the utility sector. Confservizi promotes commitment to the service of their proximity to the real needs of citizens, the appropriate use of natural resources, respecting the environment, even and especially in response to the reform of local public services. In addition to the primary function of representing its members at the national and international institutional partners, Confservizi realizes: • promotion and evaluation of laws and regulations for public utilities; • growth of corporate culture.	Participation in committees and working groups. The Ceo of Iren is the Coordinator of the energy sector as well as member of the Board of Confservizi Piemonte since January 2009.
Airu	Consistent	Italian Association for urban heating.	Participation in committees and working groups.
Anfida	Consistent	The Italian industry association that within the General Confederation of Italian Industry represents the category in the manner prescribed by the Articles Confederation, it belong to the private companies that have as their purpose the water supply activities, including water purification and sewerage management , whatever their legal form. The goals of the association are to promote solidarity and cooperation between the member companies, to organize studies, research, debates on topics of interest in the category, to protect it from an economic and trade union to represent their interests and acting as a general partner to institutions, organizations, public and private administrations. It is a significant presence and highly qualified business that is at the service of local government, to eliminate the root inefficiency and waste that represent a cost to the community and an obstacle on the way of development.	Participation in committees and working groups. The Iren Group is an associate of Anfida.
IWC	Consistent	Italian Water Convention is a non-profit association of businesses, organizations and professionals, in order to promote initiatives aimed at promoting the knowledge, technologies and innovations designed to reduce losses and to optimize the management of water systems.	Participation in committees and working groups.
International Gas Union	Consistent	IGU shall be the most influential, effective and independent non-profit organisation serving as the spokesperson for the gas industry worldwide. IGU acts in favour of gas as an integral part of a sustainable global energy future. The association promote all activities within the entire gas chain, which can add to the technical and economic progress of gas, encourage research and development towards new and better technologies for the gas community, promote the safe production, transmission, distribution and utilisation of gas; encourage and promote development of clean technology, encourage international trade in gas by supporting non-discriminatory policies and sound contracting principles and practises.	Participation in committees and working groups.
Eurelectric	Consistent	Euroelectric is the sector association which represents the common interests of the electricity industry at pan-European level, plus its affiliates and associates on several other continents. We currently have over 30 full members which represent the electricity industry in 32 European countries. Euroelectric's mission is to contribute to the development and competitiveness of the electricity industry, to provide effective representation for the industry in public affairs and to promote the role of a low-carbon electricity mix in the advancement of society.	Participation in committees and working groups.
UNIPEDE	Consistent	International Union of Producers and Distributors of electricity, an organization that brings together operators European electricity with the aim of developing the competitiveness of the associated.	In the field UNIPEDE the CEO of Iren participated in the work of the Study Committee "Hydraulic and other Renewable Energy".

CC2.3d
Do you publically 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

The Iren Group supports and participates in several research groups in the field of environmental and climate change. The Group has relationships with Universities and Research Institutes, where in some cases it participates. Main topics covered by associations and working groups where Iren participates are: energy policies, water conservation and saving, renewable energy production, waste management, local policies linked to climate change (e.g. energy plans of Municipalities, local waste management policies, etc.), research and development programs, technology and process innovation. In particular:
1) Applied research projects, developed in collaboration with the Politecnico of Turin, Turin University, ICOOR Reggio Emilia, R.I.E. of Reggio Emilia, focusing in particular on innovative Thermal Smart Grid (TSG). The Thermal Smart Grid, or "intelligent" district heating networks, form the evolution of transport systems and city distribution of the heat produced through systems such as cogeneration.
2) Research and development activities primarily aimed to develop academic research projects related to develop of district heating in the strategic areas (research contracts with Politecnico of Turin, ICOOR e RIE of Reggio Emilia) and assess opportunities associated to the use of innovative technologies. The Committee on combined heat and power and on district heating, is composed by Managers of the sector, including Iren Managers, as well as by exponents from the two main universities of Turin (Politecnico of Torino and University of Torino). The Energy Committee aims to share information from the different members.
3) Altervis Research Center, developed by Iren Rinnovabili, is focused on the development of renewable energy sources, and realizes the collaboration with the University of Modena and Reggio Emilia and works, in particular in research, training and design.
4) Collaboration with the Leap Consortium and the Mater Study Center dealing with ongoing research on issues of energy and environment. The Leap Consortium carries out activities in the sectors of the generation of thermal energy with high efficiency, biomass energy, waste and residues and technologies for the use of fossil fuels and CO2 capture. The members of the Consortium are the Politecnico di Milano (home of Piacenza), Foundation of Piacenza and Vigevano, the City and the Province of Piacenza, ASM Brescia, GROPPALLI Srl and Unical Ag S.p.A.
5) The MatER Research Center aims at establishing a sound scientific bases for the many issues related to recovery from waste independently of the expectations of any interest group. The MatER Study Centre is interested in the recovery of both material and energy from waste. MatER is a member of the Global Waste-to-Energy Research and Technology Council (GWC), an international network of research centres which carry out similar activities concerning the sustainable management of waste.
6) Participation in a research and development project named "PREPARED" aimed at defining global strategies finalized to reduce the impact of climate change related to integrated water cycle. The knowledge, experience and technology assets of the partnership in different European countries, will be made for the common factor development of innovative solutions applied by management companies in the sample sites.

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 of Directors and middle management involvement in direct and indirect engagement activities that influence policy, ensure the consistency with the company climate change strategy in general, and in particular with business decisions and ERM risk/opportunities evaluation having impact on climate change.

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?

Absolute and intensity targets

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
Abs1	Scope 1	1%	14%	2012	20814	2013	The target refers to the reduction of CO2 emissions obtained in landfills. The production of electricity from landfills managed by Iren, also allows the Group to avoid the emission of 4,740 tonnes of CO2 in 2013. The reduction of CO2 emissions is calculated by comparing the emissions generated by the Iren Group trought yhe landfills and those relating to a reference system consists of conventional thermal power plants and boilers for traditional heating. In particular, to calculate the CO2 emission factor, we used the latest available data from Terna (updates as of 2012). We considered the gross electricity production of the Italian thermoelectric system (223,153 GWh) and the amount of power produced by each source. We then multiplied the energy production of each source with the related specific emission factors indicated in the CO2 National Allocation Plan 2008-2012. In this way we determined the total amount of CO2 emitted for gross electrical production in the national system (113,225,795 t CO2). We then calculated the average emission factor for the national system (total CO2 emissions/total thermoelectric production = 0.507 tonnes CO2/MWh).
Abs2	Scope 1	0.4%	10%	2012	10251	2013	The target refers to the reduction of CO2 emissions obtained as a result of the change of a part of the company's fleet. In particular, in 2013, the petrol cars have fallen by 10%, the diesel cars have increased by 7% and the electric vehicles have doubled. The Group also manage a large number of company vehicles powered by natural gas, which is considered low environmental impact in terms of CO2 emissions, compared to other types of fuel.
Abs3	Scope 1	0.3%	7%	2012	7678	2013	The target refers to the reduction of CO2 emissions obtained as a result of more efficient building’s energy management (eg. rationalization of the use of natural gas for heating, etc.).

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
Int1	Scope 1	92%	7%	metric tonnes CO2e per unit revenue	2011	0.003412	2013	Target refers to the district heating development of the city of Turin, Parma, Genoa. In 2011 the development of district heating obtained a reduction of 890,512 tonn/year of CO2. In 2013, with the expansion of users, the development of district heating network, the emission reduction rose up to 1,301,867 tonn/year. The reduction of CO2 emissions is calculated by comparing the emissions generated by the Iren Group (CHP plant connected of district heating network and thermoelectric plant of Turbigo) and those relating to a reference system which consists of conventional thermal power plants and boilers for traditional heating. In particular, to calculate the CO2 emission factor, we used the latest available data from Terna (updates as of 2012). We considered the gross electricity production of the Italian thermoelectric system (223,153 GWh) and the amount of power produced by each source. We then multiplied the energy production of each source with the related specific emission factors indicated in the CO2 National Allocation Plan 2008-2012. In this way we determined the total amount of CO2 emitted for gross electrical production in the national system (113,225,795 t CO2). We then calculated the average emission factor for the national system (total CO2 emissions/total thermoelectric production = 0.507 tonnes CO2/MWh).
Int2	Scope 1	92%	10%	metric tonnes CO2e per megawatt hour (MWh)	2011	0.283335	2015	Target refers to the district heating development of the city of Turin, Parma, Genoa. In 2015, with the expansion of users, the development of district heating network and the increase of the energy efficiency of plants, the Group has the goal of reducing its emissions by 10% compared to 2011, considering an increase of energy production of 2% from 2011 to 2015.
Int3	Scope 1	99%	3%	metric tonnes CO2e per megawatt hour (MWh)	2011	0.266110	2013	Target refers to the district heating development of the city of Turin, Parma, Genoa, to the development of WTE plant, landfills management and renewable energy production and development (hydroelectric and solar plants). In particular, the production of the Iren Group as a whole, in 2011 recorded a reduction of 1,366,966 tonn/year of CO2. In 2013, with the expansion of users of district heating, the development of district heating network, the expansion of renewable production and of WTE, the emission reduction rose up to 2,043,931 tonn/year. The reduction of CO2 emissions is calculated by comparing the emissions generated by the Iren Group and those relating to a reference system which consists of conventional thermal power plants and boilers for traditional heating. In particular, to calculate the CO2 emission factor, we used the latest available data from Terna (updates as of 2012). We considered the gross electricity production of the Italian thermoelectric system (223,153 GWh) and the amount of power produced by each source. We then multiplied the energy production of each source with the related specific emission factors indicated in the CO2 National Allocation Plan 2008-2012. In this way we determined the total amount of CO2 emitted for gross electrical production in the national system (113,225,795 t CO2). We then calculated the average emission factor for the national system (total CO2 emissions/total thermoelectric production = 0.507 tonnes CO2/MWh).
Int4	Scope 2	100%	8%	metric tonnes CO2e per megawatt hour (MWh)	2012	0.011879	2013	Target refers to the electricity purchased by third parties, related to all energy production of Iren Group. Despite increased from Scope 2 emissions for the 2013, compared to the base year, these have grown less in proportion to the increase in the whole Group's energy production.

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
Int1	Increase	26			The CO2 emissions related to district heating showed an increase related to the increase of energy production (+ 25% in 2013 compared to 2011) and not due to worsening the energy efficiency of systems managed by the Group. There was in fact an increase of emissions avoided by the plants connected to the district heating network and by thermoelectric plant of Turbigo of more than 46% in 2013 compared to 2011.
Int2	Decrease	8			The CO2 emissions related to district heating have shown a decrease in spite of the increase of energy production (+ 2% in 2015 compared to 2011). In the future it is expected to continue to avoid CO2 emissions thanks to the diffusion of district heating compared to traditional systems (conventional thermal power plants and boilers for traditional heating).
					Target refers to the district heating development of the city of Turin, Parma,

Int3	Increase	22			Genoa, to the development of WTE plant, landfills management and renewable energy production and development (hydroelectric and solar plants). In particular, the all production of the Iren Group, in 2013, made possible to avoid the emission of 2,043,931 tonnes of CO2 (+50% compared to 2011).
Int4	Increase	7			The CO2 emissions related to the electricity purchased by third parties showed an increase related to the increase of energy production (+ 17% in 2013 compared to 2012) for the 2013, compared to the base year. Despite increases from Scope 2 emissions for the 2013, compared to the base year, these have grown less in proportion to the increase in the whole Group's energy production.

CC3.1d

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

ID	% complete (time)	% complete (emissions)	Comment
Abs1	100%	100%	The target year is the same of the reporting year.
Abs2	100%	100%	The target year is the same of the reporting year.
Abs3	100%	100%	The target year is the same of the reporting year.
Int1	100%	100%	The target year is the same of the reporting year.
Int2	50%	30%	The figures reported are obtained from a calculation based on the intensity target.
Int3	100%	100%	The target year is the same of the reporting year.
Int4	100%	100%	The target year is the same of the reporting year.

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

The Iren's production is mainly based on hydroelectric and CHP plants that are connected to the energy grid and district heating network. The Group, with its core business activities and the other services provided, mainly for the public sector, enables third parties to avoid GHG emissions:
-energy requalification of thermal power plants in the Genoa area: requalification of 34 thermal power plants.
• smart cities project: optimization of the accumulation systems, increase of the district heating system and innovations in terms of technologies and materials;
• street lighting: substitution of existing lights with those with lower power (-100W each);
• traffic lights management: substitution of existing traffic lights with LED ones;
• management of heating plants in buildings owned by Municipalities: accurate management of heating plants;
- company's heating systems renewal: the Martinetto centre (Turin) was connected to the district heating network of the city;
- Steelwork efficiency: installation of inverters and replacement of the oven
- Installations' energy efficiency: modernization and efficiency of the plant managed by the Group (Turin)
- interconnectedness of Genoa's aqueducts: careful management, from energetic point of view, of water resources
- optimization of wastewater treatment plants in the province of Reggio Emilia: energy efficiency
- efficiency of water systems in Marore plant: energy efficiency
- management of pumping systems driven by electric motors aqueduct in the province of Piacenza: improvement of the management system
- energy optimization of systems of water catchment in Parma: improvement of the management system
- efficiency boilers: energy efficiency of the Reggio Emilia boilers.
- "Acquapubblica": encourage the use of tap water through the installation of free distribution points of water (56) coming from the water systems managed by Iren Acqua Gas
Additionally, since 2009 Iren developed the project "A scuola con il sole" ("At school with the sun"), installing solar panels for the school's energy consumptions. Iren is responsible for the development, installation and maintenance of the panels.
ii.
In 2013 the Group obtained the CO2 emissions reduction of 1,256,944 tons CO2 through district heating, 44,922 tons CO2 through thermoelectric plant, 701,431 tons CO2 through hydroelectric plants, 23,844 tons CO2 through WTE plants, 4,740 tons CO2 through landfills and 4,871 through the biogas plants.
In addition, thanks to the installation of photovoltaic plants, in 2013 it has been possible to avoid the total CO2 emissions of 7,179 tons.
Thanks to the energy requalification, in 2013 it has been possible to avoid the emissions of 512 tons of CO2.
Additionally the following emissions were avoided/are planned to be avoided:
- smart cities project: when all the systems will be implemented, they should allow the decrease of around 680 tonnes CO2/year;
- street lighting: CO2 emissions reduction of 1,444 tonnes;
- traffic lights management: CO2 emissions reduction of 93 tonnes;
- management of heating plants in buildings owned by Municipalities: CO2 emissions reduction of 3,351 tonnes;
- company's heating systems renewal: CO2 emissions reduction of 780 tonnes
- Steelwork efficiency: CO2 emissions reduction of 1,418 tonnes
- Installations' energy efficiency: CO2 emissions reduction of 8,200 tonnes
- the interconnectedness of Genoa's aqueducts: CO2 emissions reduction of 8,662 tonnes;
- optimization of wastewater treatment plants: CO2 emissions reduction of 1,009 tonnes;
- efficiency of water systems: CO2 emissions reduction of 63 tonnes.
- management of pumping systems driven by electric motors aqueduct: CO2 emissions reduction of 223 tonnes
- energy optimization of systems of water catchment in Parma: CO2 emissions reduction of 373 tonnes
- efficiency boilers: CO2 emissions reduction of 840 tonnes
- "Acquapubblica" have produced significant environmental benefits: number of plastic bottles (1.5 liters) saved:100,681,133; tons oil equivalent saved: 3,524 ton; CO2 emissions avoided: 9,173 tons (about 800 tons in 2013.
"A scuola con il sole", in 2013 it permitted to avoid the production of about 200 tons of CO2.
iii. The methodology, assumptions, emission factors and global warming potentials (if you have expressed your carbon saving figure in CO2e) used for your estimations;
The emission factors used for the calculation of the C02 emissions reduction are:
• smart cities project: 0,227 tonnes CO2/MWh;
• for district heating, hydroelectric plants, landfills, biogas plants, WTE plants, and photovoltaic plants: 0.507 tonnes CO2/MWh (please see the further information).
• for all the other initiatives reported in ii point: 2626 kg CO2/Tep.
iv. Whether you are considering generating CERs or ERUs within the framework of CDM or JI (UNFCCC).
NO.

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and 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	2	8200
To be implemented*	1	680
Implementation commenced*	15	2056101
Implemented*	6	7599
Not to be implemented	0	0

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)	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, years	Comment
Energy efficiency: Building services	Energy requalification: Energy requalification of 34 thermal power plants in the Genoa area.	512	2248		<1 year	The lifetime and the related benefit of this initiative are linked to the technological change and progress.	Investment data is not available.
Low carbon energy installation	Street lighting: Substitution of existing lights with those with lower power (-100W each).	1444	500000	1155000	1-3 years	The lifetime and the related benefit of this initiative are linked to the technological change and progress.	
Low carbon energy installation	Traffic lights management: Substitution of existing traffic lights with LED ones.	93	15511	100000	4-10 years	The lifetime and the related benefit of this initiative are linked to the technological change and progress.	
Energy efficiency: Building services	Management of heating plants in buildings owned by Municipalities: Accurate management of heating plants in buildings owned by Municipalities finalize to energy consumption reduction.	3351	14712			The lifetime and the related benefit of this initiative are linked to the technological change and progress.	Investment and payback period data are not availables.
Energy efficiency: Processes	Company's heating systems renewal: The Martinetto centre (Turin) was connected to the district heating network of the city. The new plant started in the 2012-2013 heating season. It's a voluntary initiative	780	3424	41600	11-15 years	The lifetime and the related benefit of this initiative are linked to the technological change and progress.	
Energy efficiency: Building fabric	Steelwork efficiency: Installation of inverters and replacement of the oven.	1418	204960	190000	<1 year	The lifetime and the related benefit of this initiative are linked to the technological change and progress.	

CC3.3c

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

Method	Comment
Compliance with regulatory requirements/standards	
Dedicated budget for energy efficiency	
Financial optimization calculations	
Internal finance mechanisms	

Further Information

CC 3.2a - Emission factor used to calculated the CO2 emissions avoided: we used the latest available data from Terna (updates as of 2012). We considered the gross electricity production of the Italian thermoelectric system (223,153 GWh) and the amount of power produced by each source. We then multiplied the energy production of each source by the related specific emission factors indicated in the CO2 National Allocation Plan 2008-2012. In this way we determined the total amount of CO2 emitted for gross electrical production in the national system (113,225,795 t CO2). We then calculated the average emission factor for the national system (total CO2 emissions/total thermoelectric production = 0.507 tonnes CO2/MWh). CC 3.3a - Data inserted in the table refers to the number of types of initiatives. Each initiative can include more than one project. For the 2 projects "Under Investigation": The estimated annual CO2e savings refer only to “Installations’ energy efficiency”, the other project (technological requalification of municipalities’ buildings) is in the preliminary phase of study.

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	Page/Section reference	Attach the document
In mainstream financial reports (complete)	80-87, 91-93	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC4.1/Bilancio Consolidato 2013.pdf
In voluntary communications (complete)	24-25, 50-60, 68-70, 175-176	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC4.1/Bilancio di Sostenibilità 2013.pdf

Further Information

An english version will be soon available on http://www.gruppoiren.it/bilanci_sostenibilita_iren.asp The assurance of Iren Group’s Sustainability Report and of Financial Report at 31/12/2013 has been completed but the translation of the documents is not completed at the moment. We will provide you the English copies as soon as it is translated. Attached you can find the Italian version of Iren Group’s Sustainability Report and of Financial Report at 31/12/13. Please note that the Page/Section Reference reported in the table above refers to Italian versions.

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any 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 risks 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
International agreements	Italy is involved in Kyoto International Climate Agreement and, consequently, in the 2009/28 UE Directive. The actual targets in carbon emission reduction are 20%, subject to further increase up to 25%. These targets should impact on gas-fired production units of Iren Group. Furthermore, the cost associated with ETS could vary.	Increased operational cost	1 to 3 years	Direct	More likely than not	Medium	In the short term the financial impact should not be material, because all gas-fired units are operating in high efficiency combined heat and power production and therefore changes should not affect those units before conventional units of national production mix	Combined plants high efficiency heat, power plants and district heating	There are no extra costs associated
General environmental regulations, including planning	Piedmont mandatory laws on individual metering and controlling of buildings heating could lead to a significant reduction in heat consumption in	Reduced demand for goods/services	Unknown	Direct	Very likely	Medium-high	Reduction in revenues related to heating	Evaluation of acceptable increasing in heated volumetry in order to compensate	Investments in district heating networks

	the short term. For Iren Group, largely operating in district heating, the impact could be relevant.							shorter consumption	
Uncertainty surrounding new regulation	Uncertainty about new regulations for plant operations.	Increased operational cost	1 to 3 years	Direct	Unlikely	Medium-high	The risk could impact Iren Group with increased needs for investments in new environmental technologies	Plant projects always compliant with new environmental regulation	Costs related to environmental investments
Uncertainty surrounding new regulation	Uncertainty about new regulations for plant operations.	Reduction/disruption in production capacity	1 to 3 years	Direct	Unlikely	Medium-high	Reduction in revenues in case of business interruption due to plants non compliant	Plant projects always compliant with new environmental regulation	Costs related to environmental investments
Product efficiency regulations and standards	Changes/reduction in incentives system for production with renewables and CHP.	Reduction in capital availability	1 to 3 years	Direct	Likely	Medium	Reduction in planned revenues from Green and White Certificates	Promotion of incentives for green energy production	Around 4 FTE in charge of managing interactions with regulators

CC5.1b

Please describe your 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 mean (average) temperature	Changes in average temperature mainly affect the Group in heat production for district heating, i.e. higher mean temperatures require less heat and vice-versa.	Reduced demand for goods/services	Up to 1 year	Direct	Likely	Medium	Less revenues from district heating and lower margins from CHP	None: the risk is accepted	None
Change in temperature extremes	Fast changes in energy demand for air conditioning due to summer high temperatures may lead to overloads on distribution network: this event may require emergency management to assure safety operations on the national electrical system (PESSE).	Inability to do business	Up to 1 year	Direct	Unlikely	Low-medium	Low impacts due to business interruptions needed to preserve the integrity of assets	Compliance with regulatory procedures	Investments for compliance
Change in precipitation extremes and droughts	Changes in yearly level of precipitation for the Group may determine: a) lower hydroelectric production; b) droughts in water distribution	Reduction/disruption in production capacity	Up to 1 year	Direct	Likely	Medium-high	Lower revenues from hydroelectric production	Constant managing of reservoirs levels. Pumping hydroelectric plants	IT costs. Investment and O&M costs related to pumping system

	system.								

CC5.1c
Please describe your 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
Changing consumer behaviour	Italian consumers are taking more care on climate changes in their consumption behaviours: consequently, energy wastes are reducing and green energy demand is increasing.	Reduced demand for goods/services	1 to 3 years	Direct	Likely	Medium	Reduced revenues from power	Investments in renewal (hydroelectric) plants	Investments costs
Uncertainty in social drivers	For certain categories of assets, e.g. WTE plants, "nimby" syndrome may lead to hostility from people living in the nearbies.	Inability to do business	Up to 1 year	Direct	Likely	Medium-high	Reduced investments and revenues	Communication initiatives	Advertising costs

Further Information

Page: CC6. Climate Change Opportunities

CC6.1
Have you identified any 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
Opportunities driven by changes in other climate-related developments

CC6.1a
Please describe your 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
International agreements	International/EU agreements pursuit energy efficient solutions coherent with green houses gas reduction goals. In this context, Iren Group may have development opportunities with new technologies and exploit the actual production mix.	Investment opportunities	1 to 3 years	Direct	Very likely	Medium-high	EU regulations can accelerate new projects in the field of renewable or low CO2 technologies and waste to energy, where the Group is already active.	Diversified presence in power production, environmental services, regasification.	Investment/R&D costs
Air pollution limits	Production plants of Iren Group are all based on low (or zero) CO2 technologies; air pollution limits can improve the opportunities of exploiting those assets.	Increased demand for existing products/services	1 to 3 years	Direct	Likely	Medium	Improving in exploiting power production capacity due to the increased demand of low CO2 technologies may lead to increasing revenues and margins	Low (or zero) CO2 assets	Investment costs

CC6.1b
Please describe the 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
Change in temperature extremes	Changes in temperature extremes during summer periods may increase power consumption for air conditioning needs, with higher energy prices.	Increased demand for existing products/services	Up to 1 year	Direct	Likely	Low-medium	Higher prices and revenues	Availability of plant production capacity during summer periods.	None
Change in mean (average) precipitation	Higher mean precipitation levels may determine a better exploiting of hydroelectric plants capacity.	Increased production capacity	Unknown	Direct	More likely than not	Medium	Higher revenues and margins from hydroelectric production	Investments in hydroelectric business	Investment costs
Change in temperature extremes	Lower temperatures in winter periods may increase the demand of heat for district heating and the operation of CHP plants may be improved.	Increased demand for existing products/services	Unknown	Direct	More likely than not	Medium	Higher revenues	Investments in CHP and district heating	Investment costs

CC6.1c

Please describe the 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
Changing consumer behaviour	Changes in consumer behaviour can determine these opportunities: a) shifting of power consumption towards less expensive hours in the day reduces volatility of energy prices; b) waste separate collection is increasing and this trend may determine lower costs and higher efficiency in waste management.	Reduced operational costs	Up to 1 year	Direct	Very likely	Medium-high	Power and environmental lines of business may become more efficient	Specific advertising campaigns; specific tariff structures	Advertising costs

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)

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Sun 01 Jan 2012 - Mon 31 Dec 2012	2431050	111753

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
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

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

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 Fourth Assessment Report (AR4 - 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
Natural gas	1.968	Other: Metric tonnes CO2 per 1000 Stdm3	Factors used for the CO2 emissions inventory in the national UNFCCC (average of values of the years 2010-2012). These data can be used for the calculation of emissions from 1 January 2013 to 31 December 2013. (please, see the attachment)
Diesel/Gas oil	3.173	metric tonnes CO2 per metric tonne	Factors used for the CO2 emissions inventory in the national UNFCCC (average of values of the years 2010-2012). These data can be used for the calculation of emissions from 1 January 2013 to 31 December 2013. (please, see the attachment)
Electricity	0.507	metric tonnes CO2 per MWh	To calculate the CO2 emission factor, we used the latest available data from Terna (updates as of 2012). We considered the gross electricity production of the Italian thermoelectric system (223,153 GWh) and the amount of power produced by each source. We then multiplied the energy production of each source with the related specific emission factors indicated in the CO2 National Allocation Plan 2008-2012. In this way we determined the total amount of CO2 emitted for gross electrical production in the national system (113,225,795 t CO2). We then calculated the average emission factor for the national system (total CO2 emissions/total thermoelectric production = 0.507 tonnes CO2/MWh).
Biogas	0.98	Other: Ton CO2 per MWh	The emission factor used refers to landfills. The calculation is based on internal plants data.
Other: Waste to Energy Plants	1.28	metric tonnes CO2 per MWh	The emission factor used refers to waste to energy plants. The calculation is based on internal plants data.

Further Information

For the calculation of CO2 emissions from transportation we used emission factors taking into account the vehicles category (Euro 1, 2, etc.) and fuel used. The factors are those provided by Arpa Regione Lombardia – the regional environmental agency (please, see the attachment)

Attachments

https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/tabella_coefficienti_standard_nazionali_2010_2012_v3_rdl.pdf
https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/7_Emission Factors_Trasport_ARPA Lombardia.pdf

Page: CC8. Emissions Data - (1 Jan 2013 - 31 Dec 2013)

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

2855644

CC8.3
Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

119737

CC8.4
Are there are 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

CC8.5

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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 5% but less than or equal to 10%	Data Gaps Assumptions	Some kilometers traveled by Company cars are estimated. Additionally, considering the large number of sites and facilities managed by the Group, some not material energy consumptions are not included. Please consider that assumptions and data gaps refer to not material consumptions compared to total Scope 1 emissions.	More than 5% but less than or equal to 10%	Data Gaps	Considering the large number of sites and facilities managed by the Group, some not material energy consumptions are not included.

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 (%)
Limited assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Bilancio di Sostenibilità 2013.pdf	175 (scope 1 data); 199-201 (KPMG Statement)	ISAE3000	90
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_IREN Ambientex.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia BITx.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia DieteRoncagliax.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia Genovax.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia Mirafiori.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia Moncalierix.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia Pappagnoccax.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia Politecnicox.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia PoloEnergeticox.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia Rete1x.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia S.Margheritax.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia Torino Nordx.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia Turbigox.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren Energia ViaLaziox.pdf	4-5	European Union Emissions Trading System (EU ETS)	100
Reasonable assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Dichiarazione di Verifica_2013_Iren	4-5	European Union Emissions Trading	100

	Energia ViaSardegnax.pdf		System (EU ETS)	

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 Scope 2 emissions verified (%)
Limited assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC8.7a/Bilancio di Sostenibilità 2013.pdf	175 (scope 2 data); 199-201 (KPMG Statement)	ISAE3000	90

CC8.8
Please identify if any data points other than emissions figures have been verified as part of the third party verification work undertaken

Additional data points verified	Comment
Year on year change in emissions (Scope 1)	
Year on year change in emissions (Scope 2)	
Year on year change in emissions (Scope 1 and 2)	
Year on year change in emissions (Scope 3)	

CC8.9
Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

Yes

CC8.9a
Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

17974

Further Information

CC 8.6) An english version will be soon available on http://www.gruppoiren.it/bilanci_sostenibilita_iren.asp The assurance of Iren Group's Sustainability Report at 31/12/2013 has been completed but the translation of the document is not completed at the moment. We will provide you the English copy as soon as it is translated. Attached you can find the Italian version of Iren Group's Sustainability Report with the Limited Assurance Report on Sustainability Report.at 31/12/13. CC 8.7) An english version will be soon available on http://www.gruppoiren.it/bilanci_sostenibilita_iren.asp The assurance of Iren Group's Sustainability Report at 31/12/2013 has been completed but the translation of the document is not completed at the moment. We will provide you the English copy as soon as it is translated. Attached you can find the Italian version of Iren Group's Sustainability Report with the Limited Assurance Report on Sustainability Report.at 31/12/13 . 8.9a) Data refers to CO2 emissions from biogas burned in landfills.

Attachments

https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC8.EmissionsData(1Jan2013-31Dec2013)/Bilancio di Sostenibilità 2013.pdf
https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC8.EmissionsData(1Jan2013-31Dec2013)/KPMG_Letter BdS 2013_ita.pdf

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

CC9.2
Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By activity

CC9.2d
Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Cogeneration and Thermoelectric Plants	2701237
Waste to Energy Plants	120046
Landfills	17974
Offices activities	7113
Transports (Company cars)	9274

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

CC10.2
Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By activity

CC10.2c
Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions (metric tonnes CO2e)
Processes activities	111396
Offices activities	8341

Further Information

Page: CC11. Energy

CC11.1
What percentage of your total operational spend in the reporting year was on energy?

More than 50% but less than or equal to 55%

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	11447027
Electricity	235985
Heat	9341
Steam	0
Cooling	0

CC11.3
Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	11228223
Diesel/Gas oil	39239
Motor gasoline	3378
Liquefied petroleum gas (LPG)	396
Biogas	174806
Methane	985

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	

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
			In 2013, the petrol cars have decreased by 10%, the diesel cars have increased by 7% and the electric vehicles have doubled, compared with the previous year. The Group also manages a large number of company vehicles powered by

Emissions reduction activities	0.17	Decrease	natural gas, which is considered low environmental impact in terms of CO2 emissions, compared to other types of fuel. Thanks to the fleet management the CO2 emission in 2013 have been lower (-10%) than those occurred in 2012. In 2013 the Group achieved a reduction of CO2 (-7% compared with 2012) emissions obtained as a result of a more efficient building's energy management (eg: rationalization of the use of natural gas for heating, etc.). Due to a more efficient landfills management the Group obtained a reduction of CO2 emissions equal to 14%, compared to the previous year.
Divestment	0		
Acquisitions	0		
Mergers	0		
Change in output	0		
Change in methodology	0		
Change in boundary	17	Increase	The increase of emissions is mainly due to an increase of energy production from CHP plants, boilers and thermoelectric plant (+16% in 2013 compared to 2012). In particular, in 2013, the acquisition of the Turbigo plant (that represents, for only two months, both more than 3% of the total energy production and both more than 5% of the total CO2 emissions from CHP plants, and boilers and thermoelectric plant), and the start of the WTE PAI of Parma (considering an increase in 2013 of the total WTE CO2 emissions equal to 8%, PAI represents, only for some operative months of 2013, almost 29% of the total CO2 emissions from WTE plants, compared with the weight equal to 21% of the closed WTE plant of Reggio Emilia, considered in the previous year CO2 calculation and considering the not relevant change in 2013 CO2 emissions quantity of WTE plant of Piacenza, compared with 2012 have contributed to the increase of production and emissions). Considering that due to an increase of energy production from renewable energies (+ 28% from hydroelectric plants, +61% from solar plants, etc.), and to the expansion in district heating network, in 2013 the Group obtained the CO2 emissions reduction equal to 32% compared with 2012. In particular the reduction obtained have been: 1,256,944 tons CO2 through district heating (+25% of CO2 emission reduction obtained compared with 2012), 44,922 tons CO2 through thermoelectric plant, 701,431 tons CO2 through hydroelectric plants, 23,844 tons CO2 through WTE plants, 4,740 tons CO2 through landfills and 4,871 through the biogas plants. In addition, thanks to the installation of photovoltaic plants, in 2013 it has been possible to avoid the total CO2 emissions of 7,179 tons.
Change in physical operating conditions	0		
Unidentified	0		
Other	0		

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
0.00086292956	metric tonnes CO2e	unit total revenue	47	Increase	The revenues have decrease (-20%, in part related to the reduction of trading activities revenues) more than CO2 emissions (+17%) compared to 2012.

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
647	metric tonnes CO2e	FTE employee	16	Increase	The CO2 emissions have increased more than number of employees compared to 2012.

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
0.270	metric tonnes CO2e	megawatt hour (MWh)	0.1	Decrease	The CO2 emissions have increased less than energy production compare to 2012. The intensity figure is calculated considering CO2 emissions due to energy production generated in all Iren Group's production plants (part of scope 1) compared with all electric and heating production by the Group (MWh).

Further Information

Page: CC13. Emissions Trading

CC13.1
Do you participate in any emissions trading schemes?

Yes

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
European Union ETS	Tue 01 Jan 2013 - Tue 31 Dec 2013	525175	2660000	2701799	Facilities we own and operate

CC13.1b
What is your strategy for complying with the schemes in which you participate or anticipate participating?

The Iren strategy finalized to make the Group compliant with the schemes consists in implementing an approach part of the wider approach to sustainability. Moreover it consists in realizing a continuous respect of the allowances allocated based on ETS scheme.

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	HFCs	CN11	CDM (Clean Development Mechanism)	7374	9493	No	Other: Trading
Credit Origination	HFCs	CN306	CDM (Clean Development Mechanism)	9493	9493	No	Other: Trading
Credit Origination	Other: Gas Recovery	UA1000490	JI (Joint Implementation)	2514	2514	No	Compliance

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 primary data	Explanation
Purchased goods and services	Not evaluated				
Capital goods	Not evaluated				
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not evaluated				
Upstream transportation and distribution	Not evaluated				
Waste generated in operations	Not relevant, calculated	486	The Greenhouse Gas Protocol: a Corporate Accounting and Reporting Standard (Revised Edition). Data refers to emissions generated by the transportation of waste generated by the Group, to be reused/recycled.		
Business travel	Not evaluated				
Employee commuting	Not evaluated				
Upstream leased assets	Not evaluated				
Downstream transportation and distribution	Not evaluated				
Processing of sold products	Not evaluated				
Use of sold products	Not evaluated				
End of life treatment of sold products	Not evaluated				
Downstream leased assets	Not evaluated				
	Not				

Franchises	evaluated				
Investments	Not evaluated				
Other (upstream)	Not evaluated				
Other (downstream)	Not evaluated				

CC14.2
Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance complete

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 (%)
Limited assurance	https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/CC14.2a/Bilancio di Sostenibilità 2013.pdf	176 (scope 3 data); 199-201 (KPMG Statement)	ISAE3000	90

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
Waste generated in operations	Change in boundary	17	Increase	During 2013 the increase of activities of CHP and boilers plants (due to an increase of energy production), the acquisition of the Turbigo plant and the start of the WTE PAI of Parma have generated an increase in waste produced and disposed, compared to the year 2012.

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 customers
Yes, other partners in the value chain

CC14.4a
Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

In order to meet the needs of customers sensitives to environmental issues and in line with the Group policies, Iren Mercato has expanded its range of offerings for Electrical Energy Supply with a series of green offerings (eg Block PRICE GREEN - The selection that supports the energy production from renewable sources) that allow both domestic and non-domestic market to buy electricity entirely generated from renewable sources. Following this approach, Iren Mercato annually compensates the volume taken by customers with special certificates (Guarantees of origin issued by the System Operators for Electricity-GSE/COFER), as required by resolution of the Authority for Electricity and Gas n°.104/11. The production of hydroelectric power within the Group ensures the wide availability of these guarantees. Furthermore, in order to assure customers with reference to the traceability of the whole energy chain and the highest transparency, Iren Mercato has voluntarily chosen to join the Technical Document n°. 66 Institute Certiquality (body part three) "Certification of statements concerning quotas electricity from renewable sources as part of the energy mix, as specified in sales contracts to end customers". Since August 2013, after having successfully argued the planned audits, the service sale of energy produced from renewable sources, proposed by Iren Mercato, has been certified in accordance with DT certificate n°. P 2018, above mentioned.The non-residential customers participating in a tender green can demonstrate and show their commitment to the environment through the use of the "Iren Green" trademark and its relative certificate. The label, issued by Iren Mercato, can be used by customers, in the manner envisaged by the Regulation, on their marketing and promotional materials. For the realization of its recorded Brand, Iren Mercato has organized a competition among students, in order to identify the best creative idea.
The Iren Group has undertaken, in collaboration with the municipalities Shareholders, some initiatives to raise awareness and involvement that have benefits on climate change. In particular:
-"Acquapubblica" is a project promoted by Iren Group to encourage the use of tap water through the installation of free distribution points of water coming from the water systems managed by Iren Acqua Gas. To date, 56 distributors were installed in the three provinces of Piacenza, Parma and Reggio Emilia. Since their inception distributors "Acquapubblica" have produced significant environmental benefits: supplied water: 151,021,700 liters; plastic bottles saved: N. 100,681,133; tons oil equivalent saved: 3,524 ton; CO2 emissions avoided: 9,173 ton.
- The project "A Scuola con il Sole" was born from the will to combine the industrial process of electrical production with the spread of awareness of the rational use of natural resources and energy to protect the environment, hence addressing the project to primary schools to propagate sustainable practices in the area, in particular with the direct involvement of the younger generation. The educational program (19,800 people involved) includes:
- meetings (246 meeting) of representatives of Iren Rinnovabili with the different classes of the School to illustrate the different forms of energy, energies from renewable sources and operation of the photovoltaic system installed at the School (23 photovoltaic systems have been installed);
- panels on display in the school complex which explain the operating system installed on the roof, thanks to the presence of counters that show energy production and reduction of CO2 emissions in real time;
- distribution of a brochure (6,800 brochures for students and 7,300 leaflets for families) to all students with information on solar energy, simple exercises to be done to better understand the operation, as well as tips for saving energy at home and at school;
- distribution of information that were also at domestic level, related to the attention that can be put into practice for energy saving at home.
The project, it was carried out in 20 Municipalities, has been politically and socially accepted thanks to its consistency with the objectives of the area in terms of energy savings. In addition, the cost savings that the project created for schools was an important lever of social sharing in a time of economic and financial difficulties for families and for public administrations Municipalities).
- In addition, the Iren Group, to ensure the environmental reliability of its suppliers, it requires in the qualification phase, where necessary, the possession of the certification of the Environmental Management System according to the UNI EN ISO 14001 and / or EMAS Regulation and the application of the Economically Viable Best Available Technology criterion with lower environmental impact. The Iren Group evaluates the performance of its suppliers through a vendor rating system that is

also based on environmental criteria.

Further Information

14.2) An English version will be soon available on http://www.gruppoiren.it/bilanci_sostenibilita_iren.asp The assurance of Iren Group's Sustainability Report at 31/12/2013 has been completed but the translation of the document is not completed at the moment. We will provide you the English copy as soon as it is translated. Attached you can find the Italian version of Iren Group's Sustainability Report with the Limited Assurance Report on Sustainability Report.at 31/12/13 .

Attachments

https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/KPMG_Letter BdS 2013_ita.pdf
https://www.cdp.net/sites/2014/73/31273/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/Bilancio di Sostenibilità 2013.pdf

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
Fabrizio Tucci	CSR 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 2018 if possible).

Year ending	Date range
2011	Sat 01 Jan 2011 - Sat 31 Dec 2011
2012	Sun 01 Jan 2012 - Mon 31 Dec 2012
2013	Tue 01 Jan 2013 - Tue 31 Dec 2013
2015	Thu 01 Jan 2015 - Thu 31 Dec 2015

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)
2011	2569	8194	2247250	0.3
2012	2528	8708	2320522	0.3
2013	3573	10471	2733567	0.3
2015	4436	10393	2704645	0.2

Further Information

Figures reported refer both to electricity and heating.

Page: EU2. Individual Country Profiles - Italy

EU2.1
Please select the energy sources/fuels that you use to generate electricity in this country

Hydro
Other renewables
Other

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)
2011	503	983
2012	508	1082
2013	616	1382
2015	616	1295

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)
2011	7	4
2012	7	9
2013	17	14
2015	11	12

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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2011	2059	7207	2247250	0.311
2012	2013	7617	2320522	0.304
2013	3025	9075	2733567	0.301
2015	3809	9085	2704645	0.297

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)
2011	0	0	0	0
2012	0	0	0	0
2013	0	0	0	0
2015	0	0	0	0

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)
2011	1390	570	85207	0.149
2012	1393	699	92598	0.132
2013	1430	542	105690	0.195
2015	1414	721	166961	0.231

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)
2011	3959	8764	2332457	0.266
2012	3921	9407	2413121	0.257
2013	5003	11013	2839257	0.258
2015	5849	11114	2871606	0.258

Further Information

EU2.1 H Other renewables Data refers to the Group photovoltaic plants. EU2.1 I Other (combined heat and power + thermoelectric + waste + biogas) The figures relate to combined heat and power plants, thermoelectric plant, waste to energy plants and biogas from landfill. For combined heat and power plants figures relate to both electricity and heating. EU2.1K Total thermal including solid biomass Figures refer only to boilers. Data referring to thermal production of combined heat and power plants has been included in the previous table "Other".

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?

Yes

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
Italy – green certificates	5.03%	2.52%	2014	The Group is committed to the respect of obligations, thanks to its production from renewable source.

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	125	19.3%	The figures include data related to hydroelectric energy, other renewable energy and waste to energy.The figure is in M Euros

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	103	15.4%	2015	The figures include data related to hydroelectric energy and other renewable energy. The figure is in M Euros.

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	3	1.2%	2015	The figures include data related to hydroelectric energy and other renewable energy. The figure is in M Euros.

Further Information

CDP