

0.1

Introduction

Please give a general description and introduction to your organization

Eni is major integrated energy company committed to growth in the activities of finding, producing, transporting, transforming and marketing oil and gas. Eni, with global operations in 79 Countries and almost 80,000 people, is active along the entire energy value chain: Exploration & Production; Gas & Power; Refining & Marketing; Engineering & Construction and Petrochemical.

In particular, Eni holds a strong presence in all phases of the gas value chain: supply; transport; distribution; marketing and LNG operations. Eni is largely exposed to gas upstream segment, particularly thanks to the very large projects it undertook in recent years. Integration with upstream operations provides Eni with the ability to monetize its equity gas reserves and to pursue joint opportunities in the gas market and in particular in LNG operations. Gas will continue to play a very important role in the future of Eni. A few examples: the giant gas field of Perla in Venezuela discovered in 2009. 2010 appraisal activities confirmed Perla as a major gas discovery, one of the most significant in recent years and the largest ever in Venezuela, with volumes of gas in place of over 16,000 bcf. Perla will be fast track developed with an early production phase targeted to start-up by 2013; The significant exploration potential in the Far East (Western Australia, Indonesia and China gas shale); The development of unconventional gas in Tunisia and East Europe (Poland and Ukraine) leveraging on competences acquired in Quicksilver in the US. In the gas downstream segment, Eni is the leader in the European gas market thanks to its unique competitive position granted by a large and diversified gas supply portfolio, made up of long-term supply contracts and equity gas, direct access to a vast infrastructure system, long-term relationships with key producing countries, and market knowledge. These assets provide Eni with a solid platform for organic growth in the European market. Eni targets an average annual rate of 5% growth between 2010 and 2014 in its key target markets in Europe and in its domestic Italian market; this growth will be driven by the increased competitiveness of its offer, leveraging on the ongoing renegotiations with its gas suppliers. In addition, a large installed power generation capacity in Italy and the expected increase in volumes produced up to more than 29 TWh by 2014 (almost 8% of the domestic electricity production), will enable Eni to extract further value from gas, diversifying its commercial outlets.

In 2010, Eni reported consolidated operating profit of €98.52 billion, with an adjusted net profit of €6.87 billion. Investments and acquisitions amounted to €14.28 billion.

An integrated operational mode and a constant research of excellence are among the most important success' drivers for Eni, which establishes long-term relationships with Producing Countries. These drivers allow Eni to reach targets of sustainable development and represent a competitive advantage in the current energy scenario. Eni's activities in the world take often place in areas characterized by low Human Development Index. Eni is committed to the social and economical support of Producing Countries and to the mitigation of big inequalities, starting from those concerning energy access.

0.2**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
Fri 01 Jan 2010 - Fri 31 Dec 2010

0.3**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
United States of America
Australia
China
Austria
Belgium
Croatia
Cyprus
Czech Republic
Denmark
France
Germany
Greece
Hungary

Select country
Ireland
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom
Algeria
Angola
Cameroon
Cote d Ivoire
Egypt
Equatorial Guinea
Gabon
Ghana
Libyan Arab Jamahiriya
Mali
Morocco
Mozambique
Nigeria
Tunisia
Azerbaijan
Timor Leste
India
Indonesia
Iran, Islamic Republic of

Select country
Iraq
Kazakhstan
Kuwait
Malaysia
Oman
Pakistan
Papua New Guinea
Qatar
Russia
Saudi Arabia
Singapore
Taiwan
Thailand
Turkmenistan
Ukraine
United Arab Emirates
Vietnam
Yemen
Argentina
Brazil
Canada
Colombia
Dominican Republic
Ecuador
Mexico
Peru
Trinidad and Tobago
Venezuela
Congo, Republic of the
Congo, Democratic Republic of the

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(€)

0.5

Please select if you wish to complete a shorter information request

0.6

Modules

As part of the Investor CDP information request, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors and companies in the oil and gas industry 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 be marked as default options to your information request. If you want to query your classification, please email respond@cdproject.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.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

1.1

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

Other Manager/Officer

1.1a

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

The chief Operating Officers and the Chief Financial Officer, together with the Chief Corporate Operations Officer and the Senior Executive VPs who directly report to the CEO are permanent members of the Management Committee, which advises and supports the CEO. The Management Committee is in charge of the review and first approval of all internal procedures and strategic documents, including the ones related to climate change. On the basis of the recommendations of the CEO, Eni's Board of Directors collegially establishes the Company's strategies and objectives, including sustainability policies and climate change strategies. In addition, the Executive Vice President of Health, Safety, Environment & Quality Department is the Senior Manager with the highest Responsibility on climate change management. He reports to the Chief Corporate Operations Officer who, in turn, reports directly to the CEO.

The Executive Vice President of Health, Safety, Environment & Quality Department also chairs the Team for Greenhouse Gas Management (TGGG). TGGG was established in 2008 with the following functions:

- coordination of activities related to the Emission Trading at business units level and the individual installations involved;
- drafting of the GHG emissions plans in compliance with the Emission Trading system and consolidation of the emission reporting, identification of lines of action to guarantee the balancing among short and long term at consolidated level;
- identification of transactions to be made by each installation in fulfillment of its obligations to surrender emission allowances;
- approval of the Balancing Plans, both forecast and final version, of Eni's consolidated position in the Emission Trading system.

As for the Risk and Opportunities analysis system, the Board of Directors defines, examined proposals submitted by the Internal Control Committee, the guidelines for the company's internal control system aimed at identifying, measuring, managing and monitoring the main risks (including the one related to climate change) to which the company and its subsidiaries are exposed. In the definition of these guidelines, the Board applies sector regulations and takes into adequate consideration the referenced models and the best national and international practices. Moreover, the Board of Directors assesses annually, with the support of the Internal Control Committee, the adequacy, efficacy and efficiency of the overall internal control system with respect to Eni's characteristics.

1.2

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

Yes

1.2a

Please complete the table

Who is entitled to benefit from these incentives?	The type of incentives	Incentivised performance indicator
Chief Executive Officer (CEO)	Monetary reward	Meeting emission reduction targets
Chief Operating Officer (COO)	Monetary reward	Meeting emission reduction targets
Executive officer	Monetary reward	Meeting emission reduction targets
Management group	Monetary reward	Meeting emission reduction targets
Business unit managers	Monetary reward	Meeting emission reduction targets
Energy managers	Monetary reward	Meeting emission reduction targets
Facility managers	Monetary reward	Meeting emission reduction targets
Process operation managers	Monetary reward	Meeting emission reduction targets
Risk managers	Monetary reward	Meeting emission reduction targets

Further Information

In order to further embed responsible operating practices within Eni, a sustainability indicator has been introduced into managers' incentive package since 2007. The sustainability indicator formed by HSE metrics (including metrics linked to climate change mitigation) represents a significative percentage of the entire performance evaluation of Eni's top managers and even a bigger one of senior managers. The HSE/sustainability objectives are part of the four year strategic plan which is to be approved by the Board of Directors.

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

2.1a

Please provide further details (see guidance)

As an integrated energy company operating worldwide in 79 countries, Eni is exposed to risks related to climate change impacts on its businesses: oil & gas exploration, development and production; supply, storage, transport, distribution and marketing of natural gas, electricity generation, refining and marketing, petrochemical, oilfield services construction and engineering. The degree to which climate change could affect Eni's business is limited thanks to its well diversified portfolio.

Eni supports a risk prevention approach and focuses its choices and management activities on the reduction of the probability of the occurrence of negative events and their potential impact. To this end, Eni adopts strategies of risk management, depending on their nature and type such as mainly financial and industrial risks, compliance/regulatory risks, as well as other strategic and operational risks, such as country risks in oil & gas activities, and other risks related to exploration and production of hydrocarbon. In this context, the Board of Directors defines, after having examined the proposals submitted by the Internal Control Committee, the guidelines for the company's internal control system aimed at identifying, measuring, managing and monitoring the main risks to which the company and its subsidiaries are exposed. In the definition of these guidelines, the Board applies sector regulations and takes into adequate consideration the referenced models and the best national and international practices. Moreover, the Board of Directors assesses annually, with the support of the Internal Control Committee, the adequacy, efficacy and efficiency of the overall internal control system with respect to Eni's characteristics.

In mid-2009, Eni has launched a centralized and thorough re-examination of potential acute risks to its worldwide operations by applying a standardised methodology for the evaluation of Exposure to Risk (EtR) which encompasses the overall responsibilities, the high level evaluation process, the fields of application and the decision criteria. The EtR methodology - which takes into consideration the economic value of the asset, its impact on production as well as the risk linked to its technological complexity and geographical location - supports the prioritization of interventions both from the insurance and the operating viewpoint. The departments involved in the aforementioned industrial risks analysis are: Planning, Health Safety and Environment, Development, Production, Legal, Procurement. The Financial risks (commodities, currency, credit) are covered by the finance department.

In addition, with respect to the impact on environment - including impacts induced by climate change - standardized methodologies for the HSE Risk Management are in place. The HSE risk assessment process addresses: the identification of hazards and their potential effects; the evaluation of the likelihood and severity of hazards identified; the assessment of potential damages to people, environment, assets and reputation; the identification of risks and damages, the reduction measures.

HSE Risks management procedures are part of the Integrated Management System - IMS (100% worldwide coverage, employees and contractors), throughout the entire project life cycle. Since 2003, HSE risks have been managed through an Integrated Management System (IMS) applied throughout the global operations worldwide. The HSE IMS was revised in 2007 and in 2010 in order to introduce better auditing procedures and identification of safety leading indicators as well as risk analysis techniques. The model is consistent with the international rule ISO 14001, concerning environmental issues, and OHSAS 18001, concerning health management and safety in working conditions, and is based on an annual cycle of planning, implementation, control, review of results and definition of new objectives. Eni's contractors and suppliers are required to have an HSE IMS consistent with Eni's model and specific binding clauses concerning the HSE IMS are progressively inserted into all contracts.

The HSE IMS is systematically subject to internal and external audits. In 2010 alone, 3,723 audits were globally performed on Eni's HSE IMS. As part of a general plan involving all activities, Eni expects to certify, both ISO14001 and OHSAS, all its e&p subsidiaries by 2013. Even Eni's e&p headquarter is certified according to ISO14001 for its governance of the HSE Integrated Management System and the management of the exploration and development projects, thus ensuring that the directives issued at central level are fully adopted in all countries of operation, even if more restrictive than local legislation.

Eni's preventive approach is reinforced by a strong set of safety procedures to be applied, and constantly updated according to industry best-practices, to every single phase of the activity from engineering through to operations. Notwithstanding our absolute focus on prevention, should an accident occur, we are prepared to respond through multilevel emergency plans starting from the facility up to our headquarters, according to the magnitude of the accident. We are able to timely deploy our own equipment, dispatch our emergency team and to activate major international contractors such as OSRL.

Moreover, since 2006, Eni has set up a dedicated procedure to ensure whistleblowers' complaints, including problems of the internal control and HSE system, forwarded, also in a confidential or anonymous form, by employees, members of the company bodies or third parties such as agents or contractors are properly addressed and whistleblower protected from any retaliation.

In order to further embed responsible operating practices within Eni, a sustainability indicator has been introduced since 2007 into managers' incentive package. The HSE/sustainability objectives are derived from the four year strategic industrial plan which is approved by the Board of Directors.

Finally, as per regulatory risks and opportunities connected to Climate Change, in particular, Eni has set up a dedicated Environment/Climate Change Unit at the Corporate HSEQ Department to monitor European post 2012 policy, flexible mechanisms evolutions and low carbon economy opportunities, also by taking part to round tables, negotiations and ad hoc partnerships. Reports on investments opportunities deriving from the aforementioned analysis are also drafted by the Environment/Climate Change Unit. As per green house gas management is concerned, a dedicated team (TGGG) chaired by the EVP of HSEQ was set up in 2006 (for functions of the TGGG, see answer to question 1.1.a).

2.2

Is climate change integrated into your business strategy?

Yes

2.2a

Please describe the process and outcomes (see guidance)

Eni's Climate Strategy comprises of, both, short and long term measures aimed at reducing impact on Climate Change and, whenever possible, foster growth in developing countries. Key elements affecting our Strategy are Climate Regulation liabilities and opportunities, such as Emission Trading exposure and offset projects, as well as the increasing demand for natural gas (the cleanest fossil fuel) and the growing awareness on the Climate issues by the public opinion, governments and international institutions. The effectiveness of our Climate Strategy is assessed by measuring our GHG performances thanks to the corporate web-based database (opsGHG), in operation since 2005 and verified every year by DNV.

Eni's sustainability strategy is drafted, annually, on the basis of the main sustainability improvement objectives, including measures to contain GHGs, identified at company level. Then, the main sustainability projects to be implemented over the course of the next four years are identified as part of the Sustainability plan, which is an integral part of the company's Strategic Plan. In particular, Climate mitigation projects are described in terms of targets and climate risks/opportunities management analysis. The four year Strategic plan, including the Sustainability section, is approved by the Management Committee, which is formed by the CEO, the CFO, the Chief Corporate Operation Officers and the Senior Executives who directly report to the CEO.

The Strategic plan is, then, taken to the Board of Directors for approval. The board reviews also all the internal procedures, including climate change related procedures. The Management Committee and the Board are provided with periodical updates on the status of implementation of projects. In particular, as per carbon management projects, updates are provided for directly by the Climate Unit in the HSEQ department. In addition, the Greenhouse Gas Management Team,

composed by GHG managers at subsidiaries' and Business Units' level, is in charge of the annual approval of the CO2 Allowances related activities (identification of possible reduction measures, coordination of audits, certification and training, benchmarking Eni's GHG performance against peers). As per the short term mitigation objectives, the carbon management strategy of Eni is based on:

1. the achievement of the flaring emissions reduction target set in the strategic plan;
2. the implementation of energy efficiency programs at single industrial plant level;
3. the gradual replacement of high carbon content fuels with cleanest fuels, promoting, in particular, the use of natural gas;
4. the electricity generation through latest generation gas power plants;
5. the reporting of indirect emissions and the promotion of energy-saving behaviours among employees, suppliers, consumers.

As per the gas flaring reduction commitment, in particular, Eni has set a target of reducing by 80% its flaring emissions by 2014 vs 2007 level. Eni's flaring down programme, which entails \$1.1 B of investments, combines the progressive reduction of gas flaring and the valorisation of the associated gas. The objective will be achieved thanks to the implementation of several projects, mainly in Nigeria, Congo, Algeria and Tunisia. Whenever possible, the associated gas is to be valorised by providing local communities in developing countries with new electricity sources. This is the case of the Kwale-Okpai (Nigeria) and the M'Boundi-Djeno (Republic of Congo) power plants which are fed with associated gas (previously flared) contributing to reduce considerably the energy poverty of those countries and therefore sustaining their economic development. Energy efficiency initiatives implemented in the refining and petrochemical sectors have already generated, in 2010 alone, 29 ktoe of energy savings (about 77 ktCO₂) and will allow 54 ktoe/y savings - or more than 150 ktCO₂ saved - each year. Most of the reductions are expected in the refining sector thanks to the Stella Polare Project focused on the implementation of operational measures. In particular, the adoption of the energy management system compliant to the ISO16001 standard in refineries will generate a 2% reduction in the energy consumption.

The ICT activity is also expected to generate further energy savings. Eni is implementing a 30 MW load-up innovative data centre at the top level in terms of energy efficiency, much higher than conventional technologies. When fully in operation the new data centre will be able to grant savings of 335.4 ktonCO₂. Furthermore, Eni headquarters can rely on 650 fixed videoconferencing systems in meeting rooms and 400 smaller portable systems, that have been installed since 2005. Videocalls, integrated with the VoIP phone system, are also available (3,000 webcam on 35,000 IP phones in 2011). In 2010, more than 200,000 videoconferences and 1,000,000 videocalls took place in Eni, thus saving many trips for an estimated emissions reduction of 27,000 tCO₂e/year. In addition, more than 28,000 employees can rely on instant messaging, presence, file and desktop sharing systems available in more than 300 branch offices around the world.

With regards to the control of indirect "Scope 3" emissions, Eni is completing the extension of its reporting boundary to "products purchased" and "core contracted activities" shifting focus also on its major contractors' carbon footprint. For this purpose, Eni has joined the CDP-Supply Chain Initiative since 2010. Eni is also stimulating the adoption of energy saving behaviours by the general public through its "Eni30percento" energy saving multimedia awareness campaign (www.30percento.it).

The Eni30percento initiative has reached around 6 million people since the launching in 2007. Eni is also stimulating the energy savings behaviour of its 80,000 employees worldwide through the "Eni takes its tie off" scheme adopted in summer in the company's HQs. Temperature is taken one degree higher than usual summertime levels, thus ensuring a more sustainable use of air conditioning that grants a 9% reduction in energy consumption. Finally, the capture and sequestration of carbon dioxide (CCS), the development of renewables and new energy vectors are just some examples of Eni's long-term commitment to the development of new technologies aimed at generating long-term benefits in terms of climate mitigation.

2.2b

Please explain why not

2.3

Do you engage with policy makers to encourage further action on mitigation and/or adaptation?

Yes

2.3a

Please explain (i) the engagement process and (ii) actions you are advocating

Methodology

Eni takes part in the initiatives of National and International organizations that are direct interlocutors of the Regulatory Authorities. Confindustria, Assoelettrica, Unione Petrolifera, UNICE, EUROPIA, IPIECA, IETA (International Emissions Trading Association), UN Global Compact, OGP, the World Bank's GGFR (Global Gas Flaring Reduction) Partnership.

At national level, Eni's Environment/Climate Unit collaborates with both the Italian Ministries of Environment and Industry and the European Commission for the definition of the climate change framework at European and Italian levels and the development of the related legislation (Emissions Trading, CCS, Renewable sources, etc.).

Eni's participation in the European and International policy-making process is also performed in accordance with the organizations mentioned above.

The engagement is continuous on specific issues, by means of the submission of dossiers like those regarding the European Emission Trading Scheme (on specific issues regarding the general rules or Eni's installations) or the Flexible Mechanisms submissions (both for projects or comments).

The interaction is guaranteed also by the publication of position papers on Climate related topics (some are drafted directly by Eni, others are drafted in collaboration with other players within the associations that we join).

Topics

Currently Eni is paying close attention to the post Kyoto negotiations and the European Commission (EC)'s Roadmap for moving to a competitive low carbon economy in 2050 (COM 2011/112), presented in March 2011. Eni's Environment/Climate Unit, along with other Eni's competent units, is analyzing the impacts (positive and negative) of the proposed measures. areport will be drafted on conclusion of the analysis.

The aim of the EC's Communication is to define an, action and investment plan to reduce by 80-95% EU's greenhouse gas emissions in 2050, compared to 1990. All economic sectors are required to contribute, especially the Power generation which shall achieve the zero total emissions in 2050. In order to reach the ambitious goal over the next 40 years, the EU will need additional investments(compared to a Reference scenario) of 1.5% of GDP per year, or 270 billion euro / year especially in the field of energy in order to cut GHG emissions by 25% in 2020 (vs. 1990) instead of the 20% previously envisaged..

Important issues of the Roadmap imply the application of CCS to all Power plants (including natural gas combined cycle), the diminished importance given to Biofuels (unlike the 20-20-20 Package), the impacts on the development of renewable sources and the changes in the European occupational trends. The Roadmap plans to achieve its goals exclusively through domestic reductions in the EU. This element represents a critical point that can jeopardize the deployment of clean technologies in the developing countries.

Regarding the post Kyoto regime, eni believes that the future climate agreement shall include emerging economies and reform the existing tools as well as identify new and more efficient ones in order to achieve concrete mitigation results and a more equitable development. Last December, the Cancun 16th Conference of the Parties (COP 16) was concluded with two positive documents that call for a shared effort to stem the rise in temperature to no more than 2 ° C and reduce the level of emissions of developed countries from 25 to 40% by 2020 compared to 1990 emissions. The conference also gave a boost to negotiations on Technological cooperation, Climate Finance, new offset Mechanisms, Forest Protection initiatives (REDD).

Advocacy Actions

Regarding the outcomes of Cancun, Eni considers very positive the decisions on reinforcement of technological cooperation and the launch of Green Climate Fund. The fund will finance the initiatives of mitigation and adaptation in developing countries. Currently Eni advocates for a quick definition of the procedures to implement the measures and involve involvement of the private sector. In order to implement more efficient policies to mitigate emissions, it will be also necessary to improve the flexible mechanisms (CDM and JI) introduced by the Kyoto Protocol. In particular there is a need to reform the CDM. Regarding the CDM reform eni believes that is fundamental to accelerate the deployment of the tool in the LDCs (Least Developed Countries) and more in general in African countries, that are the areas that so far have had less benefits from the CDM.

Since December Eni has participated in initiatives aimed at responding to submission calls by UNFCCC regarding the CDM reform.

With respect to the Phase III of Emission Trading Scheme, Eni's Environment/Climate Unit has been advocating, at both Italian and European level, the improvement of the application rules. For example, Eni's has participated in several public consultations regarding the implementation of CO2 Auction Regulation, Guidelines on State Aid to compensate indirect costs of Emission Trading, Guidelines on Monitoring, Reporting and Verification.

Page: 3. Targets and Initiatives

3.1

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

Absolute and intensity targets

3.1a

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
1	Scope 1	56%	80%	2007	19923.24	2014	Target covers emissions from flaring

3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
1	Scope 1	100%	40%	Other: T Co2 eq / ktoe	2007	286.7	2014	Indicator considers 100% operated HC production

3.1c

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	Comments
1	Decrease	11.74%			

3.1d

Please provide details on your progress against this target made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
1	42.86%	43.39%	For absolute target
2	42.86%	34.35%	For intensity target

3.1e

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

3.2

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

Yes

3.2a

Please provide details (see guidance)

Eni's gas & power division provides technical support to customers, helping them to set up solutions to increase their energy efficiency. This activity also allows eni to obtain white certificates. A white certificate is a tradable title, certifying the saving of 1 toe, which is given by the Italian Energy Authority (more details on www.autorita.energia.it). There are three different kinds of certificate available: type I: electricity savings (in terms of primary energy); type II: natural gas savings; type III: other fuels savings. The evaluation of the number of certificates that may be attributed, is made following general or specific rules approved by the Energy Authority, comparing the energy performance to the market standard for the involved application, resulting in a prudent estimation of the saving. The standard duration of a project is generally set at a 5-year period during which savings may be certified, even if its effects can last beyond. Most of savings were recorded in the industrial sector. The white certificates and the CO2 saving which were obtained in 2010 by Eni's Gas&Power Division are listed beneath:

Type I (savings of electricity): 40 toe; emission factor: 2.84 tCO2/toe; resulting emission saving: 114 tCO2;

Type II (savings of natural gas): 3052 toe; emission factor: 2.35 tCO2/toe; resulting emission saving: 7172 tCO2;

Type III (savings of other fuel): 18765 toe; emission factor: 3.07 tCO2/toe; resulting emission saving: 57609 tCO2;

The projects were able to grant a saving of 21857 toe in total, avoiding 64895 tCO2.

The reference for the emission factors of other fuels is given by the IPCC Report (they were considered as oil), while for the electricity the emission factor was calculated dividing 0.531 (average emission factor of the thermoelectric power generation in Italy, published by Terna - the Italian TSO - <http://www.terna.it/LinkClick.aspx?fileticket=PgmBzvheblE%3d&tabid=418&mid=2501>) by the 0.187 toe/MWh, which is the parameter set by the Italian Energy Authority for the calculation of the saving of primary energy related to electricity saving (Resolution EEN/3/2008 in Italian language and executive summary in English in <http://www.autorita.energia.it/inglese/enlex/08.htm>).

Italgas, Eni's subsidiary leader in natural gas distribution in Italy, is an obliged subject and has to deliver an amount of white certificates to the Energy Authority, proportional to its share of energy distributed in the previous year.

The obligations for year 2009 (compliance in 2010) were 325,979 certificates for Italgas and 26,129 certificates for the subsidiary Napoletana Gas; the first was accomplished at 99.3%, with the annulment of 323,805 certificates; while the second one was accomplished at 85.4% with the annulment of 22,302 certificates. The Italian law allows satisfying the residual obligation in following two years, requiring that at least 60% is satisfied in the year to which the obligation refers to.

The 2010 target is 436,447 certificates for Italgas and 35,252 certificates for Napoletana Gas. Even in a short market of white certificates, the two companies have been able to obtain enough certificates to satisfy 60% of the obligation plus the residual obligation of the previous year.

Furthermore, Eni contributes to increase energy efficiency in transport sector thanks to its BLU line of fuels.

The new eni blu super+ is a new petrol that gives you up to an extra 8% of power thanks to its 100 octanes (when the accelerator valve is fully open - WOT) and decidedly improved recovery, up to 6% more than with standard petrol. The fuel's elevated detergent properties not only maintain the valves clean (the keep clean effect reduces deposits by more than 95%) but also remove previously accumulated deposits in vehicle run on commercial fuels (the clean up effect removes up to 80% of deposits).

The new eni blu diesel+ is a new high-performance diesel that ensures reduced consumption and increased mileage (an extra 800 km every 20,000 km); the innovative blu clean molecule guarantees maximum injection system cleanliness and the maintenance over time of maximum engine power. The complete elimination of deposits in the injectors (even the most sophisticated) of vehicles run for a long time on commercial diesel (the clean-up effect) permits the total recovery of initial efficiency (Full Power Restoration). Such effects have been verified also for modern injectors EURO 5 engines.

More details on http://www.eni.com/en_IT/products-services/fuels/petrol/blusuper/blu-super-plus.shtml and http://www.eni.com/en_IT/products-services/fuels/diesel/bludiesel-tech/blu-diesel-plus.shtml

3.3

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

3.3a

Please provide details in the table below

Activity type	Description of activity	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
Energy efficiency: processes	Energy efficiency initiatives in refining and petrochemical sectors, completed in 2010. The yearly saving of energy, expected from the interventions at regime conditions, is estimated in 54 ktoe/y (over 150 ktCO ₂ /y)			>3 years
Behavioral change	The Refining and Marketing division of Eni has set up an energy management system compliant to the standard ISO16001 for the refinery of Venice. It was the first industrial plant certified for this standard in Italy. In next years other installations and offices will be certified for this standard. The cost is negligible, especially considering the expected results, so the payback may be considered very short. It is estimated that such an energy system management model may be able to reduce the energy consumption of a refinery by 2%.			<1 year
Fugitive emissions reductions	Regarding the gas flaring reduction commitment, eni set a target of 80% emission reduction by 2014 vs 2007 level. This goal will be achieved by means of different initiatives mainly located in Nigeria, Congo, Algeria and Tunisia: • NIGERIA: gas flaring is progressively being reduced thanks to projects foreseeing revamping and upgrading of several oil centres, gas plants, flow stations and the development of the current pipeline network facilities for the transportation to the Bonny LNG plant • CONGO: the associated gas coming from the M'Boundi oilfield is recovered and used to fuel 2 power plants: the Djeno CED (50 MW) and the new CEC (300 MW - on line in 2010) • ALGERIA: installation of multiphase pumps at Rom oil field, the construction of a new 12" 37 km long export pipeline and the re-injection of all the associated gas from the fields • TUNISIA: the integrated Gaz du Sud Project has allowed flaring to be reduced at the Adam, Oued Zar and Djebel Grouz Concessions, increasing the current supply of gas to the STEG gas pipeline for the domestic Tunisian market.		1000000000	

Activity type	Description of activity	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
Behavioral change	Natural gas and renewable sources are the ideal allies to guarantee the energy mix of the future. Both are sustainable from the environmental viewpoint and are a good combination in terms of production costs, given the high competitiveness of electricity production from natural gas. eni has achieved the leadership in natural gas sales in Europe (18% of the market), and represents one of the International Oil Companies with the highest production share of natural gas (amounting to 44% of its hydrocarbons production). The leadership among the International Oil Companies in the production of natural gas in Africa and the relevant production of electricity are an excellent starting point to guarantee a balanced energy mix that includes not only gas, but also renewable sources. eni's capacity of operating efficiently using innovative technological solutions along the entire energy supply chain is a point of strength also for corporate growth in the field of electricity generation from renewable sources. Eni believes that among renewable energies solar energy has the greatest potential to integrate traditional sources. For this reason Eni bets on research investing more than Euro 106 million in the next four years. The most significant initiative is a partnership with the Massachusetts Institute of Technology (MIT) aimed at investigating technologies for large-scale exploitation of solar energy.		106000000	
Energy efficiency: processes	Energy efficiency investments in refining and petrochemical sector, planned in the period 2011-2014.			>3 years

3.3b

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

Method	Comment
Financial optimization calculations	For the initiatives of energy saving in refining and petrochemical sector generally it is required to respect financial parameters (payback period, internal rate of return, net present value). In economic evaluation of projects, also the value of avoided emissions is considered.

3.3c

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

4.1

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

Publication	Page/Section Reference	Identify the attachment
In annual reports (complete)	127-128	2010 Annual Report
In voluntary communications (complete)	the report is entirely dedicated to the ESG performance, including carbon emissions and related KPIs, performance in the 2008-2010 period at corporate level and by business sector	2010 Sustainability Performance
In voluntary communications (underway) – this is our first year	from I to V, from 1 to 22	Eni for Development
In voluntary communications (complete)	10,33,40,41	Oil 12 - December 2010
In voluntary communications (complete)	8,10,22,5051	Oil 11 - September 2010

Further Information

Since 2009, Eni integrates its financial reporting with a document dedicated to the analysis and reporting of the Sustainability Performance in the latest three years. The Sustainability Performance 2010 gives an overall view of Eni's ESG data and KPIs at consolidated and at business sector level in 2008-2010, according the Global Reporting Initiative (version G 3.0) guidelines.

In addition, the "Sustainability Performance in 2010" outlines 2010 results and objectives set for the period 2011-2014 with a special focus on climate change. The data featured refers to Eni SpA and its consolidated companies. The area of consolidation is the same as that for financial reporting, with the exception of a certain data as clearly specified in the document.

In 2010, Eni also published "Eni For Development" which outlines Eni's major commitments towards sustainable development with a special focus on the access to energy in developing countries thanks to its flaring down initiatives.

Attachments

[https://www.cdproject.net/Sites/2011/34/5634/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/4.Communication/Oil12_ENG_sfoglio_def.pdf](https://www.cdproject.net/Sites/2011/34/5634/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/4.Communication/Oil12_ENG_sfoglio_def.pdf)
[https://www.cdproject.net/Sites/2011/34/5634/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/4.Communication/Annual-Report-2010.pdf](https://www.cdproject.net/Sites/2011/34/5634/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/4.Communication/Annual-Report-2010.pdf)
[https://www.cdproject.net/Sites/2011/34/5634/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/4.Communication/eni_sustainability_performance_2010_eng.pdf](https://www.cdproject.net/Sites/2011/34/5634/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/4.Communication/eni_sustainability_performance_2010_eng.pdf)
[https://www.cdproject.net/Sites/2011/34/5634/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/4.Communication/OIL11_usa.pdf](https://www.cdproject.net/Sites/2011/34/5634/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/4.Communication/OIL11_usa.pdf)
[https://www.cdproject.net/Sites/2011/34/5634/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/4.Communication/ENI FOR DEVELOPMENT](https://www.cdproject.net/Sites/2011/34/5634/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/4.Communication/ENI%20FOR%20DEVELOPMENT)

Module: Risks and Opportunities [Investor]**Page: 5. Climate Change Risks****5.1**

Have you identified any climate change risks (current or future) that have 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

5.1a

Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1	International agreements	The growing concern on Climate Change is increasingly affecting worldwide environmental policies. In particular, new strategies for the sustainable use of energy resources shall be identified. Eni plays an active role in, both, implementing emission reduction initiatives and taking part in National and European organizations that are direct interlocutors of the Regulatory Authorities. In particular, the post Kyoto agreement 2012 is due to reform the existing mechanism and to identify new and more inclusive policies. The 16th Conference of the Parties (COP 16) held in Cancun last December has called for a shared effort to limit the rise in temperature to 2° C and for the reduction of developed Countries emissions from 25 to	Increased operational cost	1-5 years	Direct	Likely	Medium-high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>40% to 2020 vs. 1990 level. Important results of the COP 16 were also the fostering of technological cooperation, the launch of Green Climate Fund, the reform of the CDM, the boost at the implementation on policies to reduce deforestation. Although encouraging results, represented by a satisfying accord on post 2012 is very difficult to reach if we consider the opposing interests of parties involved. As far as regulatory risks at European level, looking at 2020 and 2050, regulatory evolutions can result in more stringent emissions thresholds for the company's plants in Europe as well as loss of competitiveness towards competitors located in non-EU Countries which are characterized by milder regulations or none regulations at all. On the other hand, the EU regulations (Roadmap to 2050) can affect the hydrocarbon demand in the coming years therefore impacting on the refining, petrochemicals and power generation sectors. In particular, key risks related to the European Commission "Roadmap for moving to a competitive low carbon economy in 2050" are:</p> <ul style="list-style-type: none"> -As for CO2 allowances: in order to reach the -20% target on energy efficiency, CO2 allowances would be substantially removed for the market resulting in a significant increase of the CO2 price. This would further impact the European electricity sector and consequently the manufacturing industry. - As for the Kyoto flexible mechanisms: in case the use of credits from Offsets should be limited in order to confine GHG reduction initiatives to the EU market only to the disadvantage of extra-EU carbon offset initiatives discouraging the transfer of efficient technologies toward developing countries. 					
2	Air pollution limits	<p>As far as air pollution limitations, these could be particularly impacting Eni's refining business which is located exclusively in EU. That means a possible loss of competitiveness towards extra-EU competitors characterized by milder regulations or no regulations at all. The developments of the policies on atmospheric pollutants in Countries where Eni operates could generate risks in case of regulatory changes incurred, in particular, after Eni has taken the Final Investment Decision. In order to mitigate such risks, Eni, proactively interacts with</p>	Increased operational cost	1-5 years	Direct	About as likely as not	Medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		National Governments in order to find viable solutions and pro-actively applies internal policies that anticipate stringent regulations. The latter was the case of the launch of the "Blue line" of fuels with sulphur content <10ppm two years ahead of the enforcement of the EU atmospheric regulations. Regarding Flaring regulatory risks, Eni monitors flaring reduction policy evolutions in the countries where it operates and proactively interacts with national governments in order to find viable solutions like, for example, utilizing associated gas for power generation in the producing countries. The interaction with national governments and national oil companies is either direct or through the GGFR (Global Gas Flaring Reduction), a World Bank led initiative.					
3	Carbon taxes	On 13/4/2011 EC published a proposal to review the Energy Taxation Directive (2011/169/CE): the minimum level of taxes on energy products is to be made by 2 components, one proportional to the energy content, the other to the carbon content. The tax levels in MS shall maintain the same proportion existing among the minimum levels, leading to a rearrangement of fiscal charge on fuels with diesel more charged than gasoline. This will induce a shift in favour of gasoline vs diesel, affecting the automotive market. The risk for Eni can be classified as Low, since decreasing diesel sales could be balanced by increasing gasoline sales. Moreover, the risk is considered at long term in light of the fact that the proposal requires unanimity to be approved and moreover an adequate transitional period is already envisaged by the proposal.	Reduced demand for goods/services	>10 years	Indirect (Client)	More likely than not	Low
4	Cap and trade schemes	Regulatory risks linked to Cap and Trade schemes can be divided into European and International regulatory issues. As far as the EU perspective, main risks are: the potential increase up to 30% from 20% of the 2020 EU ETS target; the possible introduction of floor carbon price; the quality restriction on offset. In this context, Eni is evaluating the best solutions for hedging the Emission Trading short position starting from 2012, paying particular attention to: 1) the relationship between EUAs and CERs; 2) the CERs/EUAs Swap, as the existence of fungible carbon products with different prices has resulted	Increased operational cost	Current	Direct	Virtually certain	Medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>in arbitrage possibilities between these products; 3) the EUA Forward Curves, as another trading opportunity lies in relationship between the cost of carry and the spread between the various vintages of EUAs; 4) the correlation between EUAs and other energy products, as Eni is involved in the supply and trading of other energy products. A souring of the target will necessarily imply the set-aside of the allowances issued by auction and a consequent increase of the carbon price. This would lead to a higher level of the risk of carbon leakage and, thus, further undermine the European industry competitiveness. In addition, in the event of the exacerbation of the target, the European Commission would decide on the additional use of offsets. As a consequence, no additional carbon credits would be assignable beyond the amount assigned according to the ETS Directive 2009/29/CE, forcing any additional GHG reduction to be pursued only in the domestic market. Moreover, quality restrictions on the use of carbon credit could reduce even further the supply of the offset. The potential introduction of emission trading schemes in Extra-EU Countries could further penalize the o&g industry. Eni is actively monitoring potential emission trading schemes in Countries of operation, and, in particular, in Australia. The Australian Carbon Pollutant Reduction Scheme (CPRS) was bound to be introduced in 2010 and has been postponed at least to 2013, waiting for greater clarity on climate regulations to be introduced by other major economies such as the US, China and India.</p>					
5	Emission reporting obligations	<p>Eni already reports worldwide overall scope 1 and 2 emissions according to the WBCSD Protocol on GHG emissions and, partially, scope 3 emissions according to the new WBCSD Protocol on scope 3 GHG emissions. Overall emissions of scope 1 and 2 are third party verified and, in particular, emissions under the EU ETS are further certified. Therefore, overall scope 1 and 2 emissions are homogenously reported into financial documents in compliance to the EU ETS stringent criteria, thus minimizing any possible risk in emission reporting obligation.</p>	Increased operational cost	Current	Direct	Likely	Low-medium
6	Fuel/energy taxes	Italy has set mandatory targets of energy saving upon	Other: Increased	1-5 years	Direct	Likely	Medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
	and regulations	<p>electricity and natural gas. The targets are in terms of white certificates (each certifies 1 toe of saved energy). Italgas, Eni's subsidiary, must comply with the obligation by delivering, each year, an amount of white certificates proportional to its market share. The price of white certificates has become higher than the amount recoverable in the distribution tariffs, set by the Italian Regulator, while obligations have increased, increasing operational costs. In addition, the EU Energy Service Directive and its transposition into Italian law (Legislative Decree 115/2008) leave the option to set mandatory targets on energy saving also on energy sellers. This disposition has not been implemented yet in Italy, since it is not of easy application. However, should the disposition come into force, the effect on energy sellers could be remarkable since a recovery mechanism in tariffs is not envisaged in the sale to final customers. The directive 2009/30/EC, revising the Fuel Quality Directive (98/70/EC), introduced a reduction target for GHG emissions from fuel lifecycle. By 2020, fuel suppliers have to decrease by 6% climate-harming emissions over the entire life-cycle of their products from 2010. This is to be reached in particular by biofuels and by improving technology in refineries. EC might require an additional 4% reduction to be achieved by other clean technologies and carbon credits from flaring down. The calculation of 2010 reference is still under discussion. The impact could be significant for the European fuel market.</p>	operational cost and reduced demand for goods				
7	Product efficiency regulations and standards	<p>The world growing energy demand and the stringent regulations and standards on efficient production and the need to balance the energy reserve portfolio are determining a thrust towards the exploitation of non-conventional resources or of conventional resources in difficult areas. The exploitation of unconventional resources could represent a risk for their impact on the environment if not properly managed. Eni intends to catch the new business opportunities in non-conventional sectors and in difficult areas, adopting the best technologies to guarantee high safety and environmental standards. Eni's ability in operating, based on enhancing</p>	Reduced demand for goods/services	Current	Indirect (Client)	Virtually certain	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		technological innovation, organization and knowledge, allows to achieve challenging business goals in full compliance with the requirements of the producing Countries and to guarantee high safety and environmental standards.					
8	Product labeling regulations and standards	EU Directive 92/75/EC has established an energy consumption labelling scheme from A to G according to a descending scale of energy efficiency classes that has been already implemented in several markets (white household appliances, light bulbs ...). Directive 92/75/EC was replaced by Directive 2010/30/EU which must be applied from 31 July 2011.	Reduced demand for goods/services	Current	Indirect (Client)	Virtually certain	Low
9	Voluntary agreements	Voluntary agreement can generate risks if commitments are not fully achievable.					
10	General environmental regulations, including planning	EU Climate and Energy package/scheme known as 20-20-20 sets the following GHG reduction targets by 2020 versus 2005: Sector subject to the ETS: GHG emission reduction by 21%. To cope with its target, Europe has implemented an Emission Trading Scheme divided in three Phases up to 2020. Phase I was a three year experimental phase from 2005 to 2007. The Phase II, currently in place, will end in 2012. The Phase III is set to start in 2013 (Directive 2009/29/CE). The main changes introduced in Phase III are: EU-wide cap on emissions and national allocations plans will not be envisaged anymore; allocation of around 50% of the cap by means of auctions rather than for free; no distribution free of charge of allowances for the electricity sector, whereas sector exposed to carbon leakage risk, like petrochemical and refining, will receive allowances for free but benchmarked against highest level of emission/energy efficiency. Non Emission trading sectors: GHG emission reduction by 10%. This target is broken down by EU member States. The reduction target agreed for Italy is set at -10% In the transport sector, major changes has been introduced by Vehicles Regulation setting emission performance standards for new passenger cars (final target of 95 gCO ₂ /km for new car in 2020), Renewable Energy directive (10% of renewable energy within transport sector by 2020), and 2008/101/CE Directive which include	Reduced demand for goods/services	1-5 years	Direct	Virtually certain	Medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		aviation sector in Emission Trading Scheme. More energy savings could be achieved through energy labelling of tyres. In the residential sector great importance is given to the buildings energy savings. The revised Directive on energy savings identifies the target of a 5-6% energy saving over European energy consumption.					
11	Uncertainty surrounding new regulation	In order to implement more efficient policies to mitigate emissions, it will be necessary to improve the flexible mechanisms (CDM and JI) and to set up the new tools (Sector mechanisms, REDD, Technology Transfer for Mitigation and Adaptation). Despite the positive changes introduced in Cancun it is necessary to simplify the flexible mechanism approval procedures and implement the proposed strategies for the new tools. Unless negotiations on these two issues won't be positively concluded, a serious risk will jeopardize future investments.	Increased operational cost	1-5 years	Direct	About as likely as not	Medium
12	Lack of regulation	Risks related to the current negotiations in the post Kyoto can affect investments. In particular the Kyoto Protocol flexible mechanisms should be simplified to reduce risks related to the official registration procedures that discourages investors. This choice can attract new investments and generate emissions reductions. It is also necessary to balance the mechanism to encourage the deployment in the less developed regions of the planet, and foster actions that enhance the technology transfer towards the poorest countries. To protect the great river forests, whose existence permits to absorb enormous amounts of atmospheric carbon, it should immediately implemented solid and effective regulations on deforestation limitation.	Wider social disadvantages	1-5 years	Direct	More likely than not	Medium
13	Other regulatory drivers	EU Roadmap 2050 toward a low carbon economy The European Commission in march 2011 has published the "Roadmap for moving to a competitive low carbon economy in 2050". In particular, potential risks deriving from the Roasmap are: - As for Carbon Capture and Storage (CCS): the possible adoption of CCS to all thermal power plants will impose this technology also to gas fired combined cycles plants. This will penalise a technology that is little impacting climate if compared to coal fired power plants (that represent the best plant solution to	Increased operational cost	1-5 years	Direct	Likely	Medium-high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>apply CCS. - As for hydrocarbon supply and prices: the widespread investments in energy efficiency could result in a downsizing of the hydrocarbons demand and a general downward pressure on prices (according to the roadmap 2050 scenario the oil price would be \$ 69/bl). Such scenario would result in the crowding out or the least efficient refineries in Europe and also limit the resources devoted to R&D and investments in renewables. -as for CO2 allowances: in order to reach the - 20% target on energy efficiency, CO2 allowances would be substantially removed for the market, resulting in a significant increase of the CO2 price. This would further impact the European electricity sector and consequently the manufacturing industry. - as for the Kyoto flexible mechanisms: in the long run, the availability of low price carbon credits will be reduced should a worldwide agreement on climate change be reached. Such a scenario would confine GHG reduction initiatives to the EU market only to the disadvantage of extra-EU carbon offset initiatives discouraging the transfer of efficient technologies toward developing countries.</p>					

5.1b

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

As per the management of regulatory risks, Eni, since early 2000, is committed to flaring reduction programs and, in 2009, has set its first flaring reduction target at company level. The 2010 updated target commits Eni to a 80% reduction of its flaring emissions by 2014 vs the 2007 level. Eni's flaring down programme, which entails \$1.1 B of investments, combines the progressive reduction of gas flaring and the valorisation of the associated gas. The objective will be achieved thanks to the implementation of several projects, mainly in Nigeria, Congo, Algeria and Tunisia. Whenever possible, the associated gas is to be valorised by providing local communities in developing countries with new electricity sources. This is the case of the M'Boundi-Djeno (Republic of Congo) and of the Kwale-Okpai (Nigeria) CCGT plants. In particular, the 480 MW plant in Kwale (Delta State of Nigeria), that started operations in 2006, was the second flaring down project worldwide and the first in Africa to be registered as a Kyoto Protocol CDM (Clean Development Mechanism).

Also energy efficiency initiatives implemented in the refining and petrochemical sectors have already generated, in 2010 alone, 29 ktOE of energy savings (about 77 ktCO₂) and will allow 54 ktOE/y savings - or more than 150 ktCO₂ saved - each year. Most of the reductions are expected in the refining sector thanks to the Stella Polare Project focused on the implementation of operational measures. In particular, the adoption of the energy management system compliant to the ISO16001 standard in refineries will generate a 2% reduction in the energy consumption.

In more general terms, Eni participates in the European and International policy-making process to monitor the regulatory evolution related to its business. The

evolution of the EU policy on climate is liable to generate high financial risks for the Company. In particular, a tighter Emission Trading regulation could further affect the competitiveness of European manufacturing companies. Even the stalemate of the negotiations on the post-Kyoto could represent a considerable risk factor, since investment decisions in offset activities in developing countries require a constant scenario in order to be taken. The EU qualitative restrictions on Clean Development Mechanisms are other risk factors worth citing in relation to the post Kyoto regulatory uncertainties. In fact, even though Eni has never invested in industrial gases abatement projects, recently banned by the EU-ETS Phase III, the uncertainties linked to further qualitative or quantitative restrictions are discouraging energy companies (and other private subjects) from investing in offset initiatives destined to reducing ETS compliance costs.

As for regulatory risks linked to Cap and Trade schemes, they can be divided into European and International regulatory issues. As far as the EU perspective, main risks are:

the potential increase up to 30% from 20% of the 2020 EU ETS target;

the possible introduction of floor carbon price;

the quality restriction on offset.

In this context, Eni is evaluating the best solutions for hedging the Emission Trading short position starting from 2012, paying particular attention to:

1) the relationship between EUAs and CERs;

2) the CERs/EUAs Swap, as the existence of fungible carbon products with different prices has resulted in arbitrage possibilities between these products;

3) the EUA Forward Curves, as another trading opportunity lies in relationship between the cost of carry and the spread between the various vintages of EUAs;

4) the correlation between EUAs and other energy products, as Eni is involved in the supply and trading of other energy products.

A souring of the target will necessarily imply the set-aside of the allowances issued by auction and a consequent increase of the carbon price. This would lead to a higher level of the risk of carbon leakage and, thus, further undermine the European industry competitiveness. In addition, in the event of the exacerbation of the target, the European Commission would decide on the additional use of offsets. As a consequence, no additional carbon credits would be assignable beyond the amount assigned according to the ETS Directive 2009/29/CE, forcing any additional GHG reduction to be pursued only in the domestic market.

Moreover, quality restrictions on the use of carbon credit could reduce even further the supply of the offset.

The potential introduction of emission trading schemes in Extra-EU Countries could further penalize the o&g industry.

Eni is actively monitoring potential emission trading schemes in Extra EU Countries of operation, and, in particular, in Australia. The Australian Carbon Pollutant Reduction Scheme (CPRS) was bound to be introduced in 2010 and has been postponed at least to 2013, waiting for greater clarity on climate regulations to be introduced by other major economies such as the US, China and India.

Finally, as per product regulations and standards risks, in May, Eni has started works for the first industrial application of the Eni Slurry Technology (EST) at its refining plant of Sannazzaro de' Burgondi (Northern Italy). The Euro 1.1 B project will be completed by the end of 2012 with the start of the 23,000 boe/day-capacity plant and follows the 1,200 boe/day demo plant in the Taranto refinery (Southern Italy) that started operation in 2005.

The EST technology, which can valorise the efficient exploitation of unconventional crudes, will also enable Eni to evaluate new, important opportunities in this industry, considering the significant reserves of this source in the world.

Futhermore, Eni contributes to increase energy efficiency in the transport sector thanks to its BLU line of fuels. In 2011, Eni launched on the market its highly efficient Eni BLUsuper+ and BLUdiesel+ fuels. The marketing of the first line of EniBLU low sulphur (<10 ppm) fuels anticipated by two years the EU regulation on fuel quality.

5.1c

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1	Change in mean (average) temperature	Eni operates in some areas at high risk of climate-related damage such as Polar Regions, Far and Middle East, Africa and the Gulf of Mexico. Rising temperatures have already altered Earth's climate, with consequences for: hydrology and water resources; agriculture and food security; terrestrial and freshwater ecosystems; coastal zones and marine ecosystems; and human health. Predictions of climate change are uncertain. The scope and scale of effects will depend on the degree and speed of adaptation of Countries, economies, and people, and will differ from region to region. Climatologists broadly agree, however, that likely effects include: melting of glaciers and ice caps, higher sea levels (up to 1m by 2100 in the base case, and ultimately by 4-7m should half of Greenland and the West Antarctic Ice Sheet melt), and more frequent and violent weather events.	Reduction/disruption in production capacity	Current	Direct	More likely than not	Medium-high
2	Change in temperature extremes	Eni operates in some areas at high risk of climate-related damage such as Polar Regions, Far and Middle East, Africa and the Gulf of Mexico. Rising temperatures have already altered Earth's climate, with consequences for: hydrology and water resources; agriculture and food security; terrestrial and freshwater ecosystems; coastal zones and marine ecosystems; and human health. Predictions of climate change are uncertain. The scope and scale of effects will depend on the degree and speed of adaptation of Countries, economies, and people, and will differ from region to region. Climatologists broadly agree, however, that likely effects include: melting of glaciers and ice caps, higher sea levels (up to 1m by 2100 in the base case, and ultimately by 4-7m should half of Greenland and the West Antarctic Ice Sheet melt), and more frequent and violent weather events.	Reduction/disruption in production capacity	Current	Direct	More likely than not	High
3	Change in mean (average) precipitation	They can represent both a threat to the plants and a cause of potential diseases, affecting workers in epidemic sensible areas.	Reduction/disruption in production capacity	Current	Direct	More likely than not	Medium-high
4	Change in precipitation pattern	Risks related to the extreme weather events and changing weather pattern are assessed throughout the project lifecycle and production phase by means of proper risk identification and implementation of proper counter actions.	Reduction/disruption in production capacity	Current	Direct	Likely	High

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		Eni has a Crisis Unit for the management of emergencies and has stipulated contracts with external consultants for the continuous monitoring of weather conditions in order to be ready for immediate responses to risky situations.					
5	Change in precipitation extremes and droughts	Changes in precipitation extremes and droughts can generate important risks such as floods or scarcity of water. Bought of them can create serious damages at our operations. In 2010, Eni developed a new approach to water resources that led to the identification of plants where there is a water stress and to the in site-specific evaluation performing the Global Water Tool that also provides forecasts on the impact of climate change on water available by 2025 and 2050. This tool allows also calculating consumption and indicators recommended by the Global Reporting Initiative, producing a picture of the water base, consumption, efficiency and type of water consumed. In response to the requests of the international financial community regarding risks for water resources, Eni took part in the CDP Water Disclosure 2010 and actively cooperates with the water task force of IPIECA. These activities allow identifying priorities, to focus on criticalities and to define types and times of intervention and expenditures required.	Reduced demand for goods/services	Current	Direct	Unlikely	High
6	Snow and ice	Icebergs can represent a threat to assets like platforms with relevant risks for the personnel safety and the environment integrity (overall oil spills). In order to limit this risk, we have set up a strong set of HSE procedures that adds effectiveness to our preventive approach. They apply to every single phase of our activities, from the engineering phase to operations, and they are constantly monitored and updated through the application of industrial best practices. All subsidiaries worldwide are subject to oil spill prevention and management checks according to the 3 year cycle HSE IMS audit plan and tests through simulations, and are required to produce an Oil Spill Contingency Plan. Time is a crucial factor in managing, and containing the magnitude of those events. We dedicate strong efforts to preparedness by ensuring that our tools and devices, such as our oil spill modelling software MedSTAR - that allows	Increased operational cost	Current	Direct	Likely	High

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		us to effectively predict the dimension, direction and speed of the oil slick – and the Containment of Undersea Blow-out Event – CUBE™ device (patent pending) for capturing oil plumes a few meters above the seabed, are developed in advance in order to be rapidly deployed in case of need. For example, the Goliat project oil spill contingency plan, the first oil development in the Barents Sea, has been prepared in light of the high environmental sensitivity of the area and includes: (i) an accurate simulation of the dynamics of a potential oil spill in the area; (ii) highly advanced oil spill detection devices which use infra-red rays to detect any spill even in the darkness of the Arctic winter; (iii) the use of a stand-by vessel with oil-spill prevention equipment; (iv) pre-agreed involvement of local fishing vessels in operations close to the shore; (v) two dedicated deposits stocked with oil-spill equipment on the shore, in order to ensure a prompt response in such a remote location. Moreover, Eni is a member of the Arctic Coordination Task Force, an OGP Task Force, and a sponsor of the JIP dedicated to the improvement of the Spill Response in Arctic Conditions.					
7	Sea level rise	Sea level rise can represent a serious risk factor for offshore facilities but also to plant built on the coasts.	Reduction/disruption in production capacity	>10 years	Direct	Likely	Medium-high
8	Tropical cyclones	Eni believes that prevention is the key element in ensuring safety in operations even taking into account the physical effects induced by extreme weather events and damages related to climate change. All subsidiaries worldwide are subject to oil spill prevention and management checks according to the 3 year cycle HSE IMS audit plan and tests through simulations, and are required to produce an Oil Spill Contingency Plan. Notwithstanding our absolute focus on prevention, should an accident occur, we are prepared to respond through multilevel emergency plans starting from the facility up to our headquarters, according to the magnitude of the accident. We are able to timely deploy our own equipment, dispatch our emergency team and to activate major international contractors such as OSRL. All subsidiaries worldwide are subject to oil spill prevention and management checks according to the 3 year cycle	Reduction/disruption in production capacity	Current	Direct	Very unlikely	High

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		HSE IMS audit plan and tests through simulations, and are required to produce an Oil Spill Contingency Plan. In line with our focus on competences, Eni's personnel in charge of Oil Spill Response is qualified by attending specific courses like the IMO 3 Course organized by OSR Ltd. Oil Spill Contingency Plans are regularly reviewed. Finally, Eni actively supports and participate in the OGP (Oil & Gas Producers association) – Global Industry Response Group and is one of the sponsors of the JIP (Joint Industry Project) that will be proposed by the three sub-committees. As a member of the OGP, Eni is one of the members of the COSPIP (Coastal Oil Spill Improvement Program) and is one of the sponsors of the JIP "Oil in Ice".					
9	Induced changes in natural resources	The reduction of natural resources such as forests and water sources can represent a major risk.	Wider social disadvantages	Current	Direct	Very likely	High
10	Uncertainty of physical risks	Climate changes long term impacts are not totally clear. This uncertainty represents an additional and serious risk factor for risk coverage planning.	Increased capital cost	1-5 years	Direct	About as likely as not	High
11	Other physical climate drivers	Eni maps area by area the risks associated with climate change's induced natural disasters. Target actions are prioritized and focused on local situations, depending on site characteristics and technical solution Indonesia: Jangkrik Natural disasters (earthquakes, tsunamis, squalls, landslides) may damage the asset or the contractors' yards with damages to people, environment and potential loss of facilities. To control this risk, engineering phase will consider the highest standard in term of safety, taking into account also all the possible natural events. Develop adequate drills and emergency response procedures and adequate training. Venezuela: Cardon IV - Perla Potential for severe weather, tropical Storm (Hurricanes) can damage the facilities. The strategy to reduce this risk is to design facilities in accordance with guidance from RP2A (API Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms) and other applicable regulations. Understanding the risks due environmental conditions and factors (wind, waves	Increased capital cost	Current	Direct	Very likely	Medium-high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		and currents) on the offshore installation vessels is included. Alaska Changes to ice conditions, possible lengthening of open water season, shorter solid ice season for travel to the Spy Island Drill site, possible more polar bear sightings. The strategy to reduce this risk is to implement polar bear plan in place complete with warning sirens, already installed polar bear cage doors outside each building exit. Gulf of Mexico The possible increase in frequency and intensity of the hurricanes and storms impacting the facilities and personal safety. The strategy to reduce this risk is preparation and personal safety procedure.					

5.1d

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

Physical risks induced by climate change can cause damage to properties and/or business interruption which may generate significant harm to the company. The financial implications are generally estimated in terms of cost to remediate direct damages at the facilities and number of days of lost production for each site. Physical risks are assessed and managed by: - Identifying and quantifying economically the exposure to risk and subsequent definition of hedging policies. - Minimizing economic losses through activities aimed at preventing possible causes and mitigating the effects.

In mid-2009, Eni Industrial Risk Management Department (at CFO level) has launched a centralized and thorough re-examination of potential acute risks to its worldwide operations by applying a standardised methodology for the evaluation of Exposure to Risk (EtR) which encompasses the overall responsibilities, the high level evaluation process, the fields of application and the decision criteria. The EtR methodology - which takes into consideration the economic value of the asset, its impact on production as well as the risk linked to its technological complexity and geographical location - supports the prioritization of interventions both from the insurance and the operating viewpoint.

The rise in the magnitude and frequency of climate change related extremes weather events, in particular, could induce an increase of insurance premiums, thus affecting operational expenditures, as well as reputational damage, should the Company not be able to face the situation properly. The evaluation of the economic impact is the key parameter that is considered when placing a proper insurance coverage, for this reason Eni's procedure (regulation 425 as part of the EtR methodology) takes into consideration also the frequency of occurrence of the hurricanes of category from 3 to 5.

Eni relies also on specific HSE Risks management procedures that are part of the Integrated Management System (IMS). The HSE IMS, consistent with ISO14001 and OHSAS 18001, covers global operations. Eni's contractors and suppliers are required to have an HSE IMS consistent with Eni's model and specific binding clauses concerning the HSE IMS are progressively inserted into all contracts. The HSE IMS is systematically subject to internal and external audits (3,723 audits globally performed in 2010).

Eni's preventive approach is reinforced by a strong set of safety procedures to be applied to every single phase of the activity from engineering through to operations. Notwithstanding our absolute focus on prevention, should an accident occur, we are prepared to respond through multilevel emergency plans starting from the facility up to our headquarters, according to the magnitude of the accident. We are able to timely deploy our own equipment, dispatch our emergency team and to activate major international contractors such as OSRL.

Finally, it should be also considered that the climate related changes induced on the availability and quality of water resources are capable of having negative effects on the health and safety of workers and increase costs in terms of number of working days lost and cost of the sanitary treatments. Health Risk assessments (HRA) are performed in all operations worldwide and the spreading of health problems is constantly monitored through Eni's worldwide network of clinic surgeries. In 2010, 182 health audits and over 320,000 diagnostic tests were performed for a spending exceeding euro 700 per capita.

As per the availability of water to local population, Eni is aware that access to water is a relevant issue for the social and economic development of the producing Countries - in particular in the Sub-Saharan Africa, such as Nigeria and Angola, where 40% and 50% of the population, respectively, has no access to water - and is committed to optimising its use in the production cycle. An example of this commitment is the performance recorded in the last 10 years, which reported the reduction in emissions and water consumption per unit of energy produced to levels of excellence in the sector: fresh water used decreased by 32% from 2000 versus a +32% growth in hydrocarbon production.

The implementation of water saving programs, which entail relevant investments, also represent a preventive approach versus the increasing water scarcity induced by climate change. In 2010, Eni has carried out a mapping on a global scale of around 270 installations that led to the identification of plants in water stresses areas and to the development of policies and improvement targets at site level. The criticality of water consumption is determined through the adoption of the Global Water Tool (GWT) which helps comparing, at geographical area or per drainage basin, water consumption data with data (sources FAO, WHO) related to the number of inhabitants, water availability, sample entities for domestic, agricultural and industrial use and the possibility of access to quality fresh water. First results has shown, that around 10% of the production sites are located in water stress areas (Algeria, Egypt, Libya, Tunisia, Pakistan and the EAU) and 20% in critical for health areas such as Angola, Congo, Indonesia, Nigeria and Pakistan. The lack of distribution infrastructures is critical for Angola, Congo and Nigeria.

Eni has carried out in the last few years a number of projects in order to optimize the use of water resources. In 2010, produced water injection projects have continued in Algeria, Egypt, Congo and Indonesia. Produced water injection helps maintaining pressure in the reservoir, while decreasing both waste from produced water and freshwater withdrawals. Eni is targeting a 62% reinjection rate to 2014 (44% by 2010). As a result of the water injection projects the produced water sent to evaporation ponds has already decreased by 54%.

As per the quality of water, the oil content in Eni's produced water, discharged into surface, has decreased by 9% in 2010 thanks efficiency improvement implemented in separator systems, in particular, in the Republic of Congo and Nigeria and other upgrading activities.

Specific projects in order to contain fresh/brackish water consumption in particularly sensitive regions are also ongoing. In 2010, the total freshwater withdrawal has been reduced by 4% mainly thanks to the start up of the "M'Boundi Sea Water Injection" project in the Republic of Congo where freshwater injection was replaced by sea water injection.

Finally, thanks its "dual flag approach" adopted in developing Countries Eni offers solutions to meet the basic needs of the populations, including access to basic sanitation services and fresh water.

In particular, Eni Foundation, an autonomous philanthropic foundation set up in 2006 has dedicated significant investment to the safeguarding and promotion of health, offering healthcare services, fresh water and nutritional, health and hygiene education.

5.1e

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
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ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1	Reputation	Oil Companies' reputation has been severely damaged by the 2010 oil spill disaster in the Gulf of Mexico. Although the event was not caused by natural events related to Climate Change, the consequences are similar to those caused by extreme events. Other Reputational risks can come from the unwillingness of some companies to act against Climate Change. In order to mitigate its impacts on Climate, Eni has been defining and implementing its Climate Strategy. The strategy foresees the following actions: - achievement of a target to reduce flaring emissions (80% reduction in 2014 compared to 2007); - implementation of energy efficiency programmes; - use and promotion of the natural gas as clean fuel; - research and development of technological options, such as geological confinement, and innovative renewables; - promotion of the sustainable use of energy behaviour among suppliers, consumers and customers.	Reduced stock price (market valuation)	Current	Direct	Likely	High
2	Changing consumer behaviour	The increasing awareness on the risks connected to climate change can seriously affect energy demand. Consumers are increasingly becoming more and more demanding for virtuous energy behaviour by major companies (in terms of more sustainable processes and products). Natural gas and renewable sources are the ideal allies to guarantee the energy mix of the future. Both are sustainable from the environmental viewpoint and are a good combination in terms of production costs, given the high competitiveness of electricity production from natural gas. eni has achieved the leadership in natural gas sales in Europe (18% of the market), and represents one of the International Oil Companies with the highest production share of natural gas (amounting to 44% of its hydrocarbons production). The leadership among the International Oil Companies in the production of natural gas in Africa and the relevant production of electricity are an excellent starting point to guarantee a balanced energy mix that includes not only gas, but also renewable sources. eni's capacity of operating efficiently using innovative technological solutions along the entire energy supply chain is a point of strength also for corporate growth in the field of electricity generation from renewable sources. After the launch of the low-sulphur (<10 ppm) content blu line of fuels ahead of EU regulations, in	Reduced demand for goods/services	Current	Direct	Likely	Medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>March 2011, Eni has launched the new Eni blu+ range of fuels. The new Eni blu+ is made up of superior quality fuels (diesel and petrol), developed to keep valves and injectors completely clean and guarantee excellent performance. The new eni blu diesel+ is a new high-performance diesel that ensures reduced consumption and increased mileage (an extra 800 km every 20,000 km); the innovative blu clean molecule guarantees maximum injection system cleanliness and the maintenance over time of maximum engine power.</p>					
3	<p>Induced changes in human and cultural environment</p>	<p>The operational excellence and the integrated approach aligned with a culture of cooperating with the producing Countries enable Eni to operate with the responsibility of an International Oil Company and the ability of investing in the Country's future of a National Oil Company. This is the "dual flag" approach, which includes the development of energy Master Plans and the management of projects even in sectors not strictly related to energy to the benefit of producing countries partners to Eni. In Nigeria and in the Republic of Congo, where about 172 and 110 thousand barrels of oil are produced per day, respectively 50% and 62% of the population has no access to electricity due to the lack of power generation plants and distribution infrastructures (source IEA). These Countries, like others in the Sub-Saharan Africa, represent the paradox of being major energy producers while suffering from energy poverty. This situation is worsened by the fact that the gas associated with oil production is often burnt, due to a lack of suitable infrastructures, with a significant negative impact on both the local and the global environment. This practice is known as gas flaring. 22% of eni's production comes from Countries where 50-80% of the population has no access to electricity. 52% of its production comes from Countries where no data is available on access to electricity, but for which the Human Development Index (HDI) is high or very high. eni is currently responsible for around 4.6% of the gas flared, and is therefore committed to find a solution to this problem through the recovery or reuse of the associated gas (flaring down). That allows to make the most of natural resources and generates several benefits for the Countries involved. eni was the first International Oil</p>	<p>Inability to do business</p>	<p>1-5 years</p>	<p>Direct</p>	<p>More likely than not</p>	<p>Medium-high</p>

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		Company in Africa to invest in power generation using associated gas, becoming the leading producer of electricity among the other energy companies. eni has implemented major electricity generation projects in Nigeria and Congo. These projects meet, respectively, about 20% and 60% of the electricity production in Countries with high levels of energy poverty.					
4	Fluctuating socio-economic conditions	In the future, Climate Change impacts could create large migration that can represent a threat for the stability of both developed and developing countries that can jeopardise current markets opportunities.	Wider social disadvantages	6-10 years	Direct	Likely	Medium-high
5	Increasing humanitarian demands	Humanitarian needs due to Climate related events can affect the well-being of the population in the developing countries, thus deteriorating the social and political equilibrium in some countries.	Wider social disadvantages	6-10 years	Direct	Likely	Medium-high
6	Uncertainty in social drivers	see comment to "induced changes in human and cultural behaviour" risk driver	Wider social disadvantages	1-5 years	Direct	Likely	Medium-high
7	Uncertainty in market signals	Market uncertainty does not enable an effective planning of research and implementation of climate friendly measures, such as investments in efficient products and processes.	Reduced demand for goods/services	6-10 years	Indirect (Client)	Likely	Medium-high
8	Other drivers	None					

5.1f

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions

Uncertainties related to markets signals or consumers' behaviour changes, as well as reputational risks, if not seriously addressed, can significantly affect the Company's market share and products' appeal with important financial consequences.

In order to address potential risks deriving from non-regulatory and non-physical climate related drivers, Eni has been implementing for the past few years a Climate Strategy paying particular attention to the valorisation of the natural gas and, in particular, of the gas associated to hydrocarbon production, with benefits in terms of GHG emission mitigation as well as development (in the case of the use of associated gas) of Developing Countries.

Around 22% of Eni's production comes from Countries where 50-80% of the population has no access to electricity. 52% of its production comes from Countries where no data is available on access to electricity, but for which the Human Development Index (HDI) is high or very high.

Eni is currently responsible for around 4.6% of the gas flared, and is therefore committed to find a solution to this problem through the recovery or reuse of the associated gas (flaring down). Eni was the first International Oil Company in Africa to invest in power generation using associated gas, becoming the leading producer of electricity among the other energy companies. Eni has implemented major electricity generation projects in Nigeria and Congo. These projects meet, respectively, about 20% and 60% of the electricity production in these Countries characterized with high levels of energy poverty.

The flaring down programs along with our commitment in optimizing the use of water in the production cycle to the benefit of the local population can help mitigating future risks related to humanitarian demands.

In fact, Eni is aware that access to water is a relevant issue for the social and economic development of the producing Countries - in particular in the Sub-Saharan Africa, such as Nigeria and Angola, where 40% and 50% of the population, respectively, has no access to water - and is committed to optimising its use in the production cycle. An example of this commitment is the performance recorded in the last 10 years, which reported the reduction in emissions and water consumption per unit of energy produced to levels of excellence in the sector: fresh water used decreased by 32% from 2000 versus a +32% growth in hydrocarbon production. In 2010, Eni has carried out a mapping on a global scale of around 270 installations that led to the identification of plants in water stresses areas and to the development of policies and improvement targets at site level. In the last few years a number of projects in order to optimize the use of water resources were carried out. In 2010, produced water injection projects have continued in Algeria, Egypt, Congo and Indonesia. Produced water injection helps maintaining pressure in the reservoir, while decreasing both waste from produced water and freshwater withdrawals. Eni is targeting a 62% reinjection rate to 2014 (44% by 2010). As a result of the water injection projects the produced water sent to evaporation ponds has already decreased by 54%.

As per the quality of water, the oil content in Eni's produced water, discharged into surface, has decreased by 9% in 2010 thanks efficiency improvement implemented in separator systems, in particular, in the Republic of Congo and Nigeria and other upgrading activities.

Specific projects in order to contain fresh/brackish water consumption in particularly sensitive regions are also ongoing. In 2010, the total freshwater withdrawal has been reduced by 4% mainly thanks to the start up of the "M'Boundi Sea Water Injection" project in the Republic of Congo where freshwater injection was replaced by sea water injection.

Thanks to its "dual flag approach" adopted in developing Countries, which is based on the signing of Memorandum of Understanding with producing Countries to meet the basic needs of the populations, including access to electricity, basic sanitation services and fresh water, Eni hedges uncertainties in social drivers.

Such a commitment is reinforced also by the activities for the safeguarding and promotion of health (offering healthcare services, fresh water and nutritional, health and hygiene education) performed by Eni Foundation, an autonomous philanthropic foundation set up in 2006 to the benefit of the most vulnerable part of the local population such as women and children.

Eni is also devoted to the valorisation of natural gas - the fossil fuel with the lowest carbon content - Eni hedged reputational risks. Eni holds a strong presence in all phases of the gas value chain (supply, transport, distribution, marketing and LNG operations). Eni is largely exposed to gas upstream segment, particularly thanks to the very large projects it undertook in recent years (for example the giant gas field of Perla in Venezuela for over 16,000 bcf of volume in place).

In the gas downstream segment, Eni is the leader in the European gas market thanks to its unique competitive position granted by a large and diversified gas supply portfolio, made up of long-term supply contracts and equity gas, direct access to a vast infrastructure system, long-term relationships with key producing countries, and market knowledge.

Finally, Eni is also fostering changes in human and cultural environment, addressing the reputational driver by stimulating energy saving behaviours among its employees, clients and general public through the adoption of:

- Green ICT data centres and the spreading of videoconferences systems (around 1,000 fixed and portable appliances) in its HQs;

- The "Eni30 percento" energy saving awareness multimedia campaign (around 6 million people reached since the launching in 2007);

- The adoption of the "Eni takes its ties off" scheme adopted in summer in the company's HQs. Temperature is taken one degree higher than usual in summer (9% reduction in energy consumption thanks to a more sustainable use of air conditioning).

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

5.1h

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

5.1i

Please explain why you do not consider your company to be exposed to 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

Page: 6. Climate Change Opportunities

6.1

Have you identified any climate change opportunities (current or future) 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

6.1a

Please describe your opportunities that are driven by changes in regulation

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
1	International agreements	<p>The growing interest of the public opinion and policy makers on Climate Change can not only generate risks but also opportunities such as implementing green businesses, developing new clean technologies and exporting sustainable development to developing countries. Eni is actively committed to fighting energy poverty, one of the Biggest obstacles to social and economic development in most of the Countries it operates in. Thanks to its integrated business model, built on operational excellence and designed to promote development in the Countries, Eni designs and implements production and distribution programmes for electricity produced in gas-fired plants by means of dedicated Memorandum of Understanding signed with several Countries, mainly in Africa. As a matter of fact, as in some areas it is not possible to use associated gas on the local market or exploit it, the gas would be flared, wasting a valuable energy resource. Through these initiatives Eni pursues multiple objectives from the consolidation of relations with oil producing Countries to the optimal use of available energy resources, to the reduction of greenhouse gas emissions. Eni was the first International Oil Company in Africa, where the company is currently present in 16 Countries, to invest in power generation using associated gas, becoming the leading producer of electricity among the other energy companies. Based on its positive experiences in Nigeria and Congo, Countries already producing electricity from gas previously flared, Eni drew up agreements with other Countries such as Mozambique, Ghana, Togo and Angola, characterized by low energy access rate, for replicating this model of associated gas use. With regard to a medium-long perspective, Eni is considering the opportunities offered by polymeric solar renewable sources as well as Forest Protection and Carbon Capture & Storage (CCS) as two means to give a sustainable future to fossil fuels.</p>	Investment opportunities	1-5 years	Direct	Very likely	Medium-high

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
2	Air pollution limits	Eni is currently responsible for around 4.6% of the gas flared worldwide, and is therefore committed to find a solution to this problem through the recovery or reuse of the associated gas (flaring down). That allows making the most of natural resources and generates several benefits for the Countries involved. Eni has implemented major electricity generation projects in Nigeria and Congo. These projects meet, respectively, about 20% and 60% of the electricity production in Countries with high levels of energy poverty. Eni has reduced flaring by over 30% in the last three years, and is investing in new energy infrastructures in order to bring this figure up to 80% by 2014. Thanks to this program, Then fully implemented, around 5 billion cubic meters (out of 134 bn of gas flared worldwide) of gas per year will be recovered and made available for markets in oil-producing Countries. The associated gas, if re-injected into the system, allows for a more efficient management of the reservoir, and grants the Country maximum productivity. If used in natural gas liquefaction plants, the associated gas increases export capacity and consolidates the producer's position on the international market. If the gas is used to supply the local market and produce electricity, the population of the oil-producing Country gains access to a stable and continuous supply of reliable and safe energy - a catalyst for social and, consequently, economic development.	Investment opportunities	1-5 years	Direct	Likely	High
3	Carbon taxes	Energy taxes: the European Commission has published a proposal to review the Energy Taxation Directive. The minimum taxation on energy products would be made by two components, respectively proportional to their energy content and to their carbon content. This will lead to a rearrangement of fiscal charge on different fuel, with diesel fuel more charged than gasoline. The automotive market will be increasingly oriented towards alimentation by gasoline than by diesel. The time horizon is in long term, since the approval of the proposal requires	Increased demand for existing products/services	1-5 years	Indirect (Client)	About as likely as not	Medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		<p>unanimity of UE MS and a transitional period is already included in the proposal; besides, the demand will require at least some years to be affected. In long term, the involved alteration of European fuel market might contribute to balance production and consumption of fuels, increasing the demand for gasoline, which currently has to be exported.</p>					
4	Cap and trade schemes	<p>Emission trading could create new opportunities for companies that are able to reduce the emission beyond the amount of allowances assigned by national competent authority. In fact, in that case they can take advantage from the allowances exceeding their emission and sell it on the market or banking to the next year if it is forecasted an increase in CO2 price. Revenues deriving from the sale of allowances saved could be destined to energy efficiency saving programs or invested in cleaner technologies in order to maintain competitive advantage as well as entail economic saving thanks to the reduced fuel consumption. An example of CERs (credits that can be used for compliance in the European Emission Trading Scheme) realized by Eni in the framework fo the Kyoto Protocol is the CDM Kwal-Okpay CCGT in Nigeria. In 2005, Eni built a 480 MW combined cycle power plant in Kwale Okpai (Delta State). The plant uses the associated gas from production activities, which would otherwise be flared. The plant supplies electricity to Power Holding Company of Nigeria, which distributes it to the end users. This was the second flaring down project worldwide and the first in Africa to be registered as a Kyoto Protocol's CDM (Clean Development Mechanism) activity in 2006. The Okpai Plant utilizes combined cycle technology to minimize heat emissions.</p>	Premium price opportunities	Current	Direct	Virtually certain	Medium-high
5	Emission reporting obligations	<p>Virtuous companies capable of reporting their emissions in a transparent and reliable (third party verified) way can take a considerable reputational advantage, in particular, in case of positive reduction</p>	Increased demand for existing products/services	Current	Direct	Likely	Medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		trends in emissions.					
6	Fuel/energy taxes and regulations	<p>Energy taxes: the European Commission has published a proposal to review the Energy Taxation Directive. The minimum taxation on energy products would be made by two components, respectively proportional to their energy content and to their carbon content. This will lead to a rearrangement of fiscal charge on different fuel, with diesel fuel more charged than gasoline. The automotive market will be increasingly oriented towards alimentation by gasoline than by diesel. The time horizon is in long term, since the approval of the proposal requires unanimity of UE MS and a transitional period is already included in the proposal; besides, the demand will require at least some years to be affected. In long term, the involved alteration of European fuel market might contribute to balance production and consumption of fuels, increasing the demand for gasoline, which currently has to be exported. Energy regulation: Italy has set mandatory targets upon electricity and natural gas distribution operators in order to increase energy efficiency and reduce GHG emissions. The targets are expressed as amounts of white certificates, each of which represents a certified saving of 1 toe. Eni's Gas&Power Division provides technical support to final customers, helping them to increase their energy efficiency, also to obtain white certificates when feasible according to Italian Law. This service may be a business itself, but also an added value to Eni's customers.</p>	New products/business services	1-5 years	Indirect (Client)	More likely than not	Medium
7	Product efficiency regulations and standards	<p>In 2009, the EU issued the Ecodesign Directive (2009/125/EC), already transposed in Italy (legislative Decree 15/2011) for the improvement in the environmental performance of Energy Related Products (ERPs) through ecodesign to the benefit of, both, businesses and consumers. With regards to the impact on Eni, as far as the supply side is concerned, the availability of ecodesign products represents an opportunity to further enhance Eni's</p>	New products/business services	Current	Indirect (Client)	Virtually certain	Low

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		emissions performance. As far as the sell side is concerned, Eni has launched green fuels with sulphur content less than 10ppm ahead of EU regulations. Eni Gas&Power Division provides technical support to final customers, helping them to increase their energy efficiency, also to obtain white certificates when feasible according to Italian Law. In a general context of emissions reduction, the availability of energy efficient products is not seen as a threat but instead as an opportunity: they are functional to the offered service.					
8	Product labeling regulations and standards	EU Directive 92/75/EC established an energy consumption labelling scheme. The directive was implemented by several other regulations thus most white goods, light bulb packaging and cars must have an EU Energy Label clearly displayed when offered for sale or rent. The energy efficiency of the appliances is rated in terms of a set of energy efficiency classes from A to G on the label, A being the most energy efficient, G the least efficient. The labels also give other useful information to the customer as they choose between various models. In an attempt to keep up with advances in energy efficiency, A+ and A++ grades were later introduced for refrigeration products. Directive 92/75/EC was replaced by Directive 2010/30/EU which must be applied from 31 July 2011. The aim of the directive is naturally to decrease energy consumption, so reducing European energy market. In a general context of emissions reduction, the availability of energy efficient products can also be an opportunity, so the overall risk is considered low. Eni Gas&Power Division provides technical support to final customers, helping them to increase their energy efficiency, also to obtain white certificates when feasible according to Italian Law. The energy labelling may be a tool functional to the offered service.	New products/business services	Current	Indirect (Client)	Virtually certain	Low
9	Voluntary agreements	Among the voluntary agreements can be of different types: - the environmental labelling product	Wider social benefits	Current	Direct	Likely	Medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		- (EEC Regulation No. 880/92, label) - the environmental management systems and audit - (EEC Regulation No 1836 / 93,EMA) - voluntary agreements. Eni is a member of 2 public-private partnership: the GGFR and the Global compact initiative. The former is a World Bank led initiatives aimed at creating the opportunities for reducing flaring with the contribute of the major Oil & Gas Companies and producing countries. The latter is a United Nations' sponsored initiative including private sector, governments and civil society, that aims at creating a policy framework for supporting sustainability principles and practices. Eni has joined also the LEAD Platform. In his speech during the launch event, Eni's Chief Executive Paolo Scaroni underlined the centrality of access to energy and the fight against electricity poverty as essential prerequisites for the attainment of the UN Millennium Development Goals. As concrete examples, Paolo Scaroni spoke about Eni's projects for electricity production from gas flaring already ongoing in Nigeria and Congo, and to be implemented in the future also in other African countries where the company operates.					
10	General environmental regulations, including planning	General environmental regulations, including planning, can generate opportunities especially if they address efficiency, CCS and sustainable energy.	New products/business services	6-10 years	Direct	More likely than not	Medium
	Other regulatory drivers	Italy has set mandatory targets upon electricity and natural gas distribution operators in order to increase energy efficiency and reduce GHG emissions. The targets are expressed as amounts of white certificates, each of which represents a certified saving of 1 toe. Eni through Italgas (G&P division), its controlled company leader in natural gas distribution to final customers in Italy, provides technical support to customers helping them to increase their energy efficiency thus obtaining "white certificates". Regarding policies to reduce Deforestation, future agreements on REDD	New products/business services	Current	Indirect (Client)	Virtually certain	Low-medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		initiatives can generate exceptional mitigation achievements along with new opportunities such as the provision of low prices carbon credits and economic development for the local communities in the areas where the company operates.					

6.1b

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

Investing within the producing countries in order to capture and use associated gas generates sustainable development in these countries (for instance power generation capacity enhancement), reduce negative impacts on the environment, and enables eni to valorise a precious resource (associated gas).

Moreover, considering the post-2012 uncertainties associated with the use of carbon credits (CERs/ERUs) allowed to European operators, eni is actively implementing green opportunities within its existing operations: these opportunities have a bigger margin than external ones.

Currently the described actions are entailing significant investments, for example, flaring down projects have entailed a €0.5 billion investment in 2009 and an additional investment of over €1.1 billion by 2013.

Eni has also invested in R&D related to novel renewable technologies, such as the Solar Frontiers Program or the Along with Petroleum Program, or the CO2 injection program. Eni believes that among renewable energies solar energy has the greatest potential to integrate traditional sources. For this reason Eni bets on research investing more than Euro 106 million in the next four years. The most significant initiative is a partnership with the Massachusetts Institute of Technology (MIT) aimed at investigating technologies for large-scale exploitation of solar energy.

Nevertheless most of the identified actions, in the next years, can result in additional incomes. In the future opportunities from efficiency or carbon credits, as well as R&D results can generate revenues and competitiveness.

6.1c

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
1	Change in mean (average) temperature	This driver could have a positive effect on gas and electricity sales destined to climatization		Unknown		Unknown	Unknown
2	Change in temperature	This driver could have a positive effect on		Unknown		Unknown	Unknown

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
	extremes	gas and electricity sales destined to climatization					
3	Change in mean (average) precipitation	Currently, this driver represents a risk for our business rather than an opportunity		Unknown		Unknown	Unknown
4	Change in precipitation pattern	Currently, this driver represents a risk for our business rather than an opportunity		Unknown		Unknown	Unknown
5	Change in precipitation extremes and droughts	Currently, this driver represents a risk for our business rather than an opportunity		Unknown		Unknown	Unknown
6	Snow and ice	Currently, this driver represents a risk for our business rather than an opportunity		Unknown		Unknown	Unknown
7	Induced changes in natural resources	Currently, this driver represents a risk for our business rather than an opportunity		Unknown		Unknown	Unknown
8	Other physical climate drivers	Currently, this driver represents a risk for our business rather than an opportunity		Unknown		Unknown	Unknown
						Unknown	

6.1d

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

Paradoxically, even if physical changes from climate change represent, primarily, a risk for the oil and gas industry (for instance, damaging fundamental infrastructures situated in critical areas), on the other hand, it is evident that some extreme events could force up oil & gas prices (e.g. Hurricane Katrina in 2005), and therefore increase oil producers' revenues.

In general, understanding climate change regional impacts is still in the early stages, but, with a mid-long term perspective, areas thought to be at very high risk include polar region, the Far and Middle East, Gulf of Mexico and Africa. This can have significant implications on energy supply, major societal dislocation, and consequent environmental, economic, and security consequences worldwide.

Eni, which was one of the first companies to recognise and invest in relations with the producing countries, has identified opportunities for a new model of cooperation in order to support the countries at high climate risk in tackling the related consequences. Eni is offering proven and tangible benefits as the creation of opportunities for social and economic development in the countries in which it operates.

6.1e

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1	Reputation	Reputation opportunities can come from the pro-activity of eni to tackle Climate Change. Indeed, in order to mitigate its impacts on Climate, Eni has been defining and implementing a challenging Climate Strategy in order to position itself among the leading companies in the fight against global change. The Strategy foresees the following actions: - achievement of a target to reduce flaring emissions (80% reduction in 2014 compared to 2007); - implementation of energy efficiency programmes; - use and promotion of the natural gas as clean fuel; - research and development of technological options, such as geological confinement, and innovative renewables; - promotion of the sustainable use of energy behaviour among suppliers, consumers and customers.	New products/business services	1-5 years	Indirect (Client)	Very likely	Medium-high
2	Changing consumer behaviour	In the coming years customers will prefer goods with low carbon footprint. The new eni blu+ fuels (superior quality diesel and gasoline) has been developed to keep injectors clean and guarantee excellent performance. Its quality will generate better efficiency of the engines, reducing the frequency of maintenance and generating less CO2 emissions due to transportation. Products like blu+ can help Eni to create new opportunities Natural gas is the cleanest fossil and represents the product with the lowest degree of polluting emissions and the lowest amount of carbon source Currently, almost one quarter of primary energy requirements in Europe are met by natural gas. Therefore, for those companies operating in the sector of natural gas, there are great opportunities of both reducing CO2 emissions and increasing business activity. In the next few years, the priorities in European and US energy policies will also be promoting more responsible consumption styles, improving energy efficiency and spreading the use of renewable sources. Being a leader on marketing sustainable fuels and developing sustainable technologies can generate market and reputation opportunities for eni. Eni boasts European leadership in the gas market leveraging on synergies from its fully integrated presence along the whole gas value chain: supply, transport, distribution, storage and marketing of	New products/business services	1-5 years	Indirect (Client)	Likely	Medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>natural gas and power generation and sale. Its large and diversified gas supply portfolio, market knowledge, long-term relationships with key producing countries, and integration with the Exploration & Production segment represent competitive advantages. The high degree of integration with the Exploration & Production division will enable the Company to achieve growth options on the gas market and monetize equity gas reserves. These actions, coupled with tight cost control will allow Eni to face an extremely challenging trading environment that is expected over the next two to three years, in particular in 2010 when the first signs of recovery in gas demand are expected to emerge. Beyond the timeline of our plan, European demand is expected to grow driven by the fundamental trends deriving from the environmental compatibility of natural gas, the depletion of European reserves and economic growth.</p>					
3	<p>Induced changes in human and cultural environment</p>	<p>In companies like eni, the ICT services are significantly energy intensive. Eni's commitment to mitigate the environmental impact of its core business, has led the company to invest in energy efficiency programmes as well as implement actions to raise the awareness among its work-force, the consumers and its suppliers. In particular, eni is planning and building a modern and innovative data center for an IT load up to 30 MW with top level energy efficiency, higher than conventional technologies: the average annual efficiency will be lower than 1.2 PUE (Power Usage Effectiveness, a measurement of the ratio between total data center energy consumption and the consumption of the IT equipment dedicated to the computer processes) compared with the best value achieved of 1.27 and an Italian average PUE of 2-3. Due to this action, the new data center will allow a saving of 335.4 ktonCO2 when it will be fully operational. Furthermore, Eni's headquarters have been equipped with 630 fixed videoconferencing systems in meeting rooms and 370 portable systems for smaller employee groups that have been installed since 2005. Video-calls integrated with the VoIP phone system is also available for many users in Eni. Thanks to these measures, since 2009 more than 150,000 videoconferences/year and 700,000 videocalls/year have been performed, thus avoiding many trips, for an estimated emissions reduction of 24,000</p>	<p>Investment opportunities</p>	<p>1-5 years</p>	<p>Direct</p>	<p>More likely than not</p>	<p>Medium</p>

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>tCO2e/year. Eni has been also addressing the public opinion awareness since some years (for example with the "Eni30percento" campaign http://www.30percento.it/) in order to promote the sustainable use of energy among customers. Moreover, since some years Eni has been applying the "Eni takes its tie off" scheme, that allows the company to keep office temperatures one degree centigrade higher than the usual summertime levels and ensure a more rational use of air conditioning and saving of energy (equivalent to a 9% reduction in energy consumption for air-conditioning systems).</p>					
4	Fluctuating socio-economic conditions	<p>Today 1.4 billion people – more than 20% of the global population - has no access to electricity, The bigger problem is in Sub-Saharan Africa, where only 31% of the population has access to electricity, being the lowest percentage of the world. Access to modern forms of energy is a prerequisite for social and economic development. For this reason, the United Nations have declared 2012 the "Year of sustainable energy for all" In order to gain access and contribute to the development of natural gas markets in the Countries where it operates, eni relies on its own business model based on an integrated approach, distinguishing skills, experience acquired in operating, sales and mid-downstream techniques and the dual flag approach. These characteristics allow the company to plan and implement integrated energy development plans together with the producing Country. Implemented energy development plans include activities such as: construction of long-distance gas transport and distribution pipelines; design and construction of liquefaction and regasification plants,; construction of combined-cycle electricity generation plants, offering the best performance in terms of efficiency and emission factors. Egypt and Tunisia are significant examples of how the support provided by the creation of a local natural gas market can aid economic and social development. Egypt is a Country where Eni boasts a historic presence (since 1955).Eni has promoted and developed natural gas production to satisfy the growing demand within the Country and has contributed to the construction of infrastructure for the export and liquefaction of natural gas (LNG), allowing the Country to generate significant revenues. Indeed Eni has an indirect shareholding in the LNG plant at Damietta, with an</p>	New products/business services	1-5 years	Direct	More likely than not	Medium

6.1f

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

Natural gas and LNG market opportunities can generate value in the short – mid term.

R&D activities have a broader timeline in order to generate tangible business benefits. Regarding investments will be realization in the next years a photovoltaic and biomass plants with an installed power of respectively 20 MWp and 25 MW.

The macro sectors in which Eni invests significantly with the contribution of Eni Foundation are: a) health prevention and protection, which is often connected to the access of fresh water, b) access to primary and secondary education, and c) socio economic empowerment, with particular attention to the value of women role in society.

Since it became operational in 2007, Eni Foundation has spent almost euro 15,000 thousand. More than euro 11,000 thousand were spent to support the Foundation's core activities, primarily healthcare project implemented in the following countries:

The Republic of Congo: almost euro 7,000 thousand for the Salissa Mwana project aimed at improving the children healthcare in remote rural areas plus more than euro 1,000 thousand for the Kento Mwana project to reduce by 2-3% the rate of mother-to-child HIV virus transmission;

- Angola: euro 2,200 thousand for the Kilamba Kiaxi project aimed at improving health conditions of the child and maternal population;

- Indonesia: euro 410 thousand for the cleft lip and palate project and for the set up of a center of excellence specialized in treating congenital facial malformations in Tarakan.

In 2010 alone, the Foundation overall expenditure was euro 2,640 euro were spent to finance the abovementioned projects:

- Salissa Mwana project (RoC, euro 1,250 thousand euro) project for rehabilitating and equipping Health Centers and setting up drinkable water plants, generators and incinerators; training and supervisory activities of healthcare and technical personnel employed in the Health Centers; sensibilization activities aimed at the communities; supporting vaccination activities; sustaining facilities-related, operating and personnel costs.

- Kento Mwana project (RoC, euro 615 thousand) for increasing coverage of counseling and screening services; developing diagnostic and specialist expertise; improving skills of healthcare personnel employed in healthcare facilities; transferring know-how to local healthcare personnel with respect to preventing the vertical transmission of HIV, sustaining facilities-related, operating and personnel costs.

- Kilamba Kiaxi project (Angola, euro 657 thousand) for: strengthening the healthcare system by constructing new Health Centers and equipping existing ones; improving the technical-managerial skills of healthcare personnel; strengthening and expanding maternal-child medical services; sustaining facilities-related, operating and personnel costs.

- 110 thousand euro for the cleft lip and palate treatment project.

6.1g

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

6.1h

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

6.1i

Please explain why you do not consider your company to be exposed to 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

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

Page: 7. Emissions Methodology

7.1

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)
Mon 01 Jan 2007 - Tue 01 Jan 2008	67423242	4230190

7.2

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

Please select the published methodologies that you use

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

US EPA Climate Leaders: Direct Emissions from Stationary Combustion

Other

7.2a

If you have selected "Other", please provide details below

- American Petroleum Industry (API) "Compendium of Greenhouse Gas Emissions Estimation Methodologies for the Oil and Gas Industry", August 2009;
- EU Emission Trading Scheme "CO2 reporting Guidelines" (UK and Italy);
- Gas Research Institute and US Environmental Protection Agency (GRI), software and reports;
- Intergovernmental Panel on Climate Change (IPCC), Guidelines for National Greenhouse Gas Inventories;
- US Environmental Protection Agency (EPA), Protocol for Equipment Leak Emission Estimates, EPA Tanks software;
- E&P Forum, Methods for Estimating Atmospheric Emissions from E&P Operations;
- US Environmental Protection Agency (EPA), Climate Leaders GHG inventory Protocol Core Module Guidance: Optional emissions from commuting, business travel and product transport, May 2008;
- Specific internal procedures developed by eni's business units that are not well represented in the recognized standards, for example Snamreagas, the eni's Italian Gas Transmission Company, has developed an own protocol for fugitive emission calculation.

7.3

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

Gas	Reference
CO2	IPCC Second Assessment Report (SAR - 100 year)
CH4	IPCC Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)

7.4

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

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	1.96	Other: kg CO2/m3	CO2: Natural Gas - EU-ETS Italian Deliberation 14/2009
Refinery gas	3.12	metric tonnes CO2 per metric tonne	CO2: Refinery fuel gas - EU-ETS Italian Deliberation 14/2009
Diesel/Gas oil	3.17	metric tonnes CO2 per metric tonne	CO2: Diesel - EU-ETS Italian Deliberation 14/2009
Other: Flaring	1.86	Other: kg CO2/m3	CO2: Flare combustion - eni protocol Rev.01
Other: Associated Gas	3.48	Other: kg CO2/m3	CO2: Gas derived from oil - EU-ETS Italian Deliberation 14/2009
Other: Fuel Oil	3.14	metric tonnes CO2 per metric tonne	CO2: Fuel Oil - EU-ETS Italian Deliberation 14/2009
Other: Flared Gas	3.03	metric tonnes CO2 per metric tonne	CO2: Flared gas (butane) - EU-ETS Italian Deliberation 14/2009
Liquefied petroleum gas (LPG)	3.02	metric tonnes CO2 per metric tonne	CO2: LPG - EU-ETS Italian Deliberation 14/2009
Natural gas	54.60	Other: gr CH4/tonne	CH4: Natural Gas API Compendium Table 4.4a AP-42 Tab 1.4.2 (7/98) converted by LHV=49.6 GJ/ton
Natural gas	0.04	Other: gr CH4/tonne	CH4: Boilers/Heaters/Furnaces natural gas Eni Protocol rev1 Tab.3-4
Natural gas	0.84	Other: gr CH4/tonne	CH4: Compression Gas turbines, Eni Protocol Rev.01 Tab D3-5
Refinery gas	1.43	Other: kg CH4/tonne	CH4: Eni Protocol Refinery FG assumed to contain 30% mol of CH4 density = 0.75 Kg/Nm3 Destruction efficiency = 99.5%
Other: Flared Gas	0.60	Other: kg CH4/m3	CH4: Flare combustion fuel gas, Eni Protocol (Tab D2-3 98 % conversion)
Diesel/Gas oil	0.18	Other: kg CH4/tonne	CH4: Diesel combustion in engines: EEMS - Air emissions calculations-dec 2002
Other: Fuel Oil	0.65	Other: kg CH4/tonne	CH4: Fuel Oil, API Compendium
Liquefied petroleum gas (LPG)	0.96	Other: gr CH4/GJ	CH4: LPG API Compendium Tbl 4-4a
Natural gas	49.20	Other: gr N2O /tonne	N2O: Natural gas API Compendium Table 4-4a @ 50.208 GJ/ton
Refinery gas	34.09	Other: gr N2O /tonne	N2O: Refinery FG EF as Natural Gas API Compendium Table 4.4a converted by 3,405E-5 ton/ton
Other: Flared Gas	0.07	Other: gr N2O /Sm3	N2O: Flare combustion process gas: Eni Protocol (default density=0.80306 kg/m3 and EEMS Tbl)
Other: Fuel Oil	90.80	Other: gr N2O /tonne	N2O: Fuel Oil, API Compendium
Liquefied petroleum gas (LPG)	4.42	Other: gr N2O /GJ	N2O: LPG, API Compendium

Further Information

Eni operates in many activity sectors: exploration and production, refining and marketing, gas transmission and distribution, petrochemical manufacturing, power generation, engineering and construction services, because of the complexity of the operations the complete list of used emission factors would be too long to include in the questionnaire, moreover they are reported in eni's "GHG Accounting and Reporting Protocol" and in the systems used for the accounting. The main applied emission factors are provided in table 11.4. The applied emission factors (EFs) are derived from many sources and refer to different estimation tiers. For instance, in combustion/flaring process the most accurate approach used for CO2 is obtained from the EF based on fuel composition data. In general, when no fuel composition data or GHG direct emission measurements are available for the CO2, CH4 and N2O calculation, equipment/source/operation, tabular EFs are taken from literature referring to the above mentioned eni's GHG Protocols

Page: 8. Emissions Data - (1 Jan 2010 - 31 Dec 2010)

8.1

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

Operational control

8.2a

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

60676123

8.2b

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

Boundary	Gross global Scope 1 emissions (metric tonnes CO2e)	Comment
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8.2c

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

Gross global Scope 1 emissions (metric tonnes CO2e) - Total Part 1	Comment
--	---------

8.2d

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e - Part 2

Gross global Scope 1 emissions (metric tonnes CO2e) - Other operationally controlled entities, activities or facilities	Comment
---	---------

8.3a

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

1885842

8.3b

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 breakdown

Boundary	Gross global Scope 2 emissions (metric tonnes CO2e)	Comment
----------	---	---------

8.3c

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 Total

Gross global Scope 2 emissions (metric tonnes CO2e) - Total Part 1	Comment
--	---------

8.3d

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

Gross global Scope 2 emissions (metric tonnes CO2e) - Other operationally controlled entities, activities or facilities	Comment
---	---------

8.4

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

8.4a

Please complete the table

Reporting Entity	Source	Scope	Explain why the source is excluded
------------------	--------	-------	------------------------------------

8.4

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

Yes

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
Eni Iran	Scope 1 and 2	Eni is operator through buy-back contracts
Eni Iraq - Zubair	Scope 1 and 2	Eni is working to include, in 2011, Zubair recently acquired assets emissions in its boundaries.

8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and Scope 2 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 2% but less than or equal to 5%	Data Gaps Assumptions Extrapolation Metering/ Measurement Constraints Sampling Published Emissions Factors	This uncertainty range is valid only for EU-ETS CO2 emission data (43% of total eni GHG emission). Since 2005, each Divisions/BU is equipped with a strong accounting and reporting tool in compliance with the certification requirements. The 59 eni installations under EU ETS regulation have adopted internal procedures in order to respond to/compliance with the allowed uncertainty fixed by the regulation and annually assured by an external verification. In case of failure of the measurement devices, the site must notify immediately the Competent Authority and the time of metering inaccuracies has to be reduced to the minimum level. Referring to the quality fuel composition data, the site has to assure a consistent sampling frequency: this value is obtained through statistical analysis of the composition data trend carried out for a reference year. The activity data uncertainty, calculated for CO2 emission of each plant, has to follow the ISO 5168:2005. The overall uncertainty range associated to this figure is: -less than 5 % for sites with GHG emission < 500,000 t CO2/y;-less than 2% for sites with GHG emission > 500,000 t CO2/y. Eni assures a good level of data accuracy, for many installations specific uncertainty assessments have been developed in order to identify the main uncertainty sources in the data gathering, handling and calculation chain. The main identified contributors to the uncertainty ranges are: -For CO2 emissions from combustion: variations in fuel gas composition; -For CH4 emissions from venting and fugitive, applied average emission factors not always suitable for each type of installation; -For CO2 equivalent emissions from Flaring and Venting: due to the operating conditions (high flow rate range and hydrocarbon composition variation) the direct measured volume and composition data are not always available. The other sources of errors that may occur include the following: -Missing or incomplete information regarding the emission sources inventory; Measurement methods; Data acquisition and transmission; Data processing. The eni's best references are: -ISO/IEC Guide 98:1995 "Guide to the expression of uncertainty in measurement" and ISO 5168:2005 "Measurement of fluid flow - Procedures for the evaluation of uncertainties"; IPIECA "Addressing Uncertainty in Oil and Natural Gas Industry Greenhouse Gas Inventories", September 2009
Scope 2	More than 20% but less than or equal to 30%	Data Gaps Assumptions Extrapolation Published Emissions Factors	The main sources of uncertainty are the applied average emission factors based on country energy mix. Uncertainty data are not available in the International Electric Grid Emission Factors(ref. "Compendium of GHG Emissions Estimation Methodologies for the Oil and Gas Industry", 2009). The missing or incomplete data regarding the worldwide purchased energy data gathering are other sources of uncertainty. According to GHG Protocol guidance on uncertainty assessment in GHG inventories, Scope 2 Emissions level of uncertainty may be +/-30% if annual average emission factors are used for a grid with multiple fuel.

8.6

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

Verification or assurance complete

8.6a

Please indicate the proportion of your Scope 1 emissions that are verified/assured

More than 90% but less than or equal to 100%

8.6b

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

Type of verification or assurance	Relevant standard	Relevant statement attached
Limited assurance (qualified)	ISAE 3000	Eni Annual Report 2010, pagg 250-251 http://www.eni.com/en_IT/attachments/publications/reports/reports-2010/Annual-Report-2010.pdf
Verification	EC Directive 2003/87/EC Annex V and 2007/589/EC as amended	Only 43% of Scope 1 Emissions See attached file "Example of ETS Verification Certificate" issued by DNV to an Eni ETS site

8.7

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

Verification or assurance complete

8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

More than 90% but less than or equal to 100%

8.7b

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

Type of verification or assurance	Relevant standard	Relevant statement attached
Limited assurance (qualified)	ISAE 3000	Eni Annual Report 2010, pagg 250-251 http://www.eni.com/en_IT/attachments/publications/reports/reports-2010/Annual-Report-2010.pdf

8.8

Are carbon dioxide emissions from the combustion of biologically sequestered carbon (i.e. carbon dioxide emissions from burning biomass/biofuels) relevant to your company?

No

8.8a

Please provide the emissions in metric tonnes CO₂e

Further Information

Ref. 8.2a,8.3a: The N₂O is accounted and disclosed, but not included in the total CO₂ equivalent calculation. In 2010 eni extended the reporting boundary, adding N₂O accounting. Eni is still verifying the accuracy of the methodologies implementation in order to guarantee the GHG data consistency and in order to include N₂O emissions in the reporting boundary next year

Ref. 8.3a: In 2010, according to eni GHG Protocol, the scope 2 indirect emissions calculation was carried out from electricity/steam purchase from third parties and specific grid average emission factors (t GHG/MWh) per each Country. The electricity (MWh) uses in the formula is the amount uses for internal consumption, the energy trading is not included. Until 2008 we applied only the Italian average emission factors. This assumption was justified by the high percentage of Italian purchased energy consumption on the total worldwide amount. The 2010 and 2009 scope 2 emission data are not comparable with 2008 (and previous ones) estimation because of scope 2 mentioned methodology change and data accounting boundary review.

Ref. 8.8: In general, Eni does not emit carbon dioxide from the combustion of biologically sequestered carbon, even if in next year 25 MW of power from biomass were planned. Anyway, since the amount of this carbon is the same which was absorbed from the atmosphere, the overall carbon balance is 0 and – according to EU-ETS regulations – the emission factor for biomass and biofuels is considered 0. Eni contributes in avoiding emissions by trading biofuels, which allows to

substitute fossil carbon with biological carbon. Eni's refining & marketing division is not involved in biofuel production, but it trades significant amounts of biofuels, which are generally blended with fossil gasoline and diesel, to be sold to the final customers. The amounts of biofuels, and of blended fuels, which were sold in the last 2 years are shown beneath; besides, while a forecast is given for current year. Biodiesel: 0,492 Mtoe in 2009; 0,656 in 2010; 0,632 Mtoe is our forecast for 2011 and 0,714 is forecasted for 2012 Biogasoline: 0,144 Mtoe in 2009; 0,168 in 2010; 0,162 Mtoe is our forecast for 2011 and 0,172 is forecasted for 2012 Besides, R&D activities are ongoing about biofuels. Most important projects about this subject are the developing of the technology ecofining™ and the study of micro organisms for biodiesel; details may be found on 2010 Financial Yearly Report of Eni (available on www.eni.com , by now only in Italian).

Attachments

[https://www.cdproject.net/Sites/2011/34/5634/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/8.EmissionsData\(1Jan2010-31Dec2010\)/Extract Annual-Report-2010.pdf](https://www.cdproject.net/Sites/2011/34/5634/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/8.EmissionsData(1Jan2010-31Dec2010)/Extract%20Annual-Report-2010.pdf)

[https://www.cdproject.net/Sites/2011/34/5634/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/8.EmissionsData\(1Jan2010-31Dec2010\)/Example ET Verification Certificate.pdf](https://www.cdproject.net/Sites/2011/34/5634/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/8.EmissionsData(1Jan2010-31Dec2010)/Example%20ET%20Verification%20Certificate.pdf)

Page: 9. Scope 1 Emissions Breakdown - (1 Jan 2010 - 31 Dec 2010)

9.1

Do you have Scope 1 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

9.1a

Please complete the table below

Country	Scope 1 metric tonnes CO ₂ e
Italy	26322068
Other: Europe	2683142
Other: Africa	26253271
Other: America	897824
Other: Asia/Australasia	4519818

9.2

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
- By activity

9.2a

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

Business Division	Scope 1 metric tonnes CO2e
Exploration & Production	31223404
Gas & Power	15794439
Refining & Marketing	7756953
Petrochemical	4642424
Engineering & Construction	1176396
Corporate and financial companies	72917
Others	9590

9.2b

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

Facility	Scope 1 metric tonnes CO2e
Eni GHG accounting and reporting system, opsGHG, account data at facility level for the main industrial plants, but at corporate level, GHG emission data are not always available per single facility. Eni operates in several activity sectors and in 77 countries, so because of the complexity and size of the operations, each Business Unit reports data with different aggregation level (site, production field, Subsidiary, Country). Eni doesn't disclose the GHG data break down for facilities because of the above mentioned gathering issues and competitiveness concerns	

9.2c

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

GHG type	Scope 1 metric tonnes CO2e
CO2	53591096
CH4	7085027

9.2d

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

Activity	Scope 1 metric tonnes CO2e
Combustion & Process	39092381
Flaring	13827931
Venting	2340032
Fugitive Emission	5415779

Further Information

Ref. 9.2c: The N2O is not included in the total CO2 equivalent calculation. In 2010 eni extended the reporting boundary, adding N2O accounting. Eni is still verifying the accuracy of the methodologies implementation in order to guarantee the GHG data consistency and in order to include N2O emissions in the reporting boundary next year

Page: 10. Scope 2 Emissions Breakdown - (1 Jan 2010 - 31 Dec 2010)

10.1

Do you have Scope 2 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

10.1a

Please complete the table below

Country	Scope 2 metric tonnes CO2e
Italy	1610734
Other: Europe	154620
Other: Africa	105572
Other: America	1270
Other: Asia/Australasia	13646

10.2

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

By business division

By facility

10.2a

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

Business division	Scope 2 metric tonnes CO2e
Exploration & Production	168741
Gas & Power	312470
Refining & Marketing	562223
Petrochemical	755290
Engineering & Construction	34476
Corporate and financial companies	3329
Others	49313

10.2b

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

Facility	Scope 2 metric tonnes CO2e
eni GHG accounting and reporting system, opsGHG, account data at facility level for the main industrial plants, but at corporate level, GHG emission data are not always available per single facility. Eni operates in several activity sectors and in 77 countries, so because of the complexity and size of the operations, each Business Unit reports data with different aggregation level (site, production field, Subsidiary, Country). Eni doesn't disclose the GHG data break down for facilities because of the above mentioned gathering issues and competitiveness concerns	

10.2c

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

Activity	Scope 2 metric tonnes CO2e
----------	----------------------------

Further Information

In 2010, according to eni GHG Protocol, the scope 2 indirect emissions calculation was carried out from electricity/steam purchase from third parties and specific grid average emission factors (t GHG/MWh) per each Country. The electricity (MWh) uses in the formula is the amount uses for internal consumption, the energy trading is not included. Until 2008 we applied only the Italian average emission factors. This assumption was justified by the high percentage of Italian purchased energy consumption on the total worldwide amount. The 2010 and 2009 scope 2 emission data are not comparable with 2008 (and previous ones) estimation because of scope 2 mentioned methodology change and data accounting boundary review

11.1

Do you consider that the grid average factors used to report Scope 2 emissions in Question 8.3 reflect the contractual arrangements you have with electricity suppliers?

Yes

11.1a

You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tonnes CO₂e

11.1b

Explain the basis of the alternative figure (see guidance)

11.2

Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

Yes

11.2a

Please provide details including the number and type of certificates

Type of certificate	Number of certificates	Comments
Other: Green Certificates (Italy)	283020	For each producer or importer of electricity, Italian law requires that a mandatory percentage of renewable energy, from new plants, is entered in the national electricity system. The percentage is applied to the electricity entered in the previous year by the same operator, net of cogeneration and – obviously – of renewable energy. The obligation is to be met by green certificates, each of which is equivalent to 1 MWh. Compliance is verified in the following year, with the supply of the certificates and their cancellation, by 31st March (see also www.gse.it). Since Eni is involved in power generation and trading, it is obliged to fulfil this legislation. Most of Eni's power generation is in fact from cogeneration plant and most of its import has a guarantee of origin from renewable sources.
Renewable Energy Certificates	22567	The RECs reported here were annulled by Eni on behalf of its customers during the reporting year.
Renewable Energy Guarantees of Origin (RE-GO)	544532	Guarantees of origin which were provided by suppliers of imported energy.

12.1

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

12.2

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

Energy type	MWh
Fuel	178392987
Electricity	32333000
Heat	10277650
Steam	20362746
Cooling	0

12.3

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

Fuels	MWh
Natural gas	117238956
Refinery gas	31887361
Liquefied petroleum gas (LPG)	467553
Motor gasoline	213750
Diesel/Gas oil	9484406
Residual fuel oil	10033747
Petroleum coke	5047930
Other: Mostly coke from catalytic cracking and fuel oil from steam cracking	4019282

Further Information

Following the guidance the data listed beneath were inserted as follows: Diesel fuel as "Distillate Fuel Oil No 1" Fuel Oil (variable sulphur content) as "Distillate Fuel Oil No 2" FOK (Fuel Oil from Steam Cracking) as "Diesel/Gas Oil"

Page: 13. Emissions Performance

13.1

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

Increased

13.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	2.15	Decrease	Eni's action plan for the mitigation of climate change focuses mainly on reducing gas flaring and increasing energy efficiency. Eni further increased its gas flaring reduction target to 80% by 2014 from 2007 levels. In order to reach this objective various projects are underway in Algeria, Congo, Libya, Indonesia, Nigeria, Tunisia, Kazakhstan dedicated to the construction of new and modern infrastructure for gas transport, more efficient power plants and gas liquefaction plants. The gas flared instead has been decreased in 2010 with respect to 2009 thanks to the start up of the Ebocha and Ob/Ob flaring down projects. In 2010, specific emissions index for flaring and venting (tonnes CO ₂ e / ktoe) decreased to 127 from 131, allowing savings of about 500 kton CO ₂ eq. In R&M sector the key emissions index – tonnes CO ₂ eq per equivalent distillation capacity (1000 barrels per standard day) decreased (-4.2%) due to the good energy management system in refinery processes and due to the implementation of energy efficiency projects, allowing savings of about 343 kton CO ₂ eq. In petrochemical sector, the key emission indexes - tonnes CO ₂ eq per energy and ethylene production - decreased (energy production: -12.5% ; ethylene production: -6.3%) due to the reduction in the use of fuel and the on-going energy saving projects, allowing savings of about 360 kton CO ₂ eq. In G&P sector the key emission indexes – ton CO ₂ eq/kWheq produced within the electrical sector decreased due to change of fuel mix (increase of natural gas instead of diesel and fuel oil), allowing savings of about 65 kton CO ₂ eq.
Change in	5.20	Increase	The total greenhouse gas emissions have increased by 5.2%, although two consecutive reductions of 7% were

Reason	Emissions value (percentage)	Direction of change	Comment
output			registered in both 2008 and 2009. The increase of almost 3 Mtonnes of CO2eq is for a 50% determined by the increase of E&P activities (the addition of 1.5% mnl ton CO2 eq is due to both the production increase and the temporary vented gas increase in Ecuador (related to technical issue) and for a 40% by the increase of power production (+ 1.2 mtonnes CO2 eq) related to the commissioning of new production plants (+ 7% of production).
Change in boundary	0.25	Increase	In 2010 Eni included Turkmenistan recently acquired assets emissions in its reporting boundary

13.2

Please describe your gross 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	Explanation
0.000629	metric tonnes CO2e	unit total revenue	10.8	Decrease	As financial emissions intensity, we decided to use the GHG Scope 1 and Scope 2 emissions per € of company revenues (net sales from operations and other income and revenues). Eni's total revenues for 2010 were € 99,479 million (ref. eni Annual Report 2010, page 138). In 2009 KPI figure was updated at 0.000705 (Eni's total revenues for 2009 were € 84,345 million (ref eni Annual Report 2009, page 56. As expected, this performance indicator decreased (-8.1%) due to the strong eni engagement in reducing GHG emission, in particular referring to energy efficiency and flaring down program. CO2 emissions per production unit decreased; furthermore, the improvement is also due to the growth of oil price

13.3

Please describe your gross 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	Explanation
783	metric tonnes	FTE Employee	2.3	Increase	Eni's total FTE employees for 2010 were 79,941, increased

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Explanation
	CO2e				respect to 2009 (+2.9%) less than CO2 emissions.

13.4

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	Explanation
1187.5	metric tonnes CO2e	Other: Kbb/SD	4.2	Decrease	Scope 1 - Refining's KPI, expressed in terms of tCO2 equivalent per equivalent distillation capacity (1000 barrels per standard day). The refining specific key performance indicator decreases (-4.2%) due to the implementation of energy efficiency projects
407		Other: KWheq	0.7	Decrease	Scope 1 - Power Generation's KPI, expressed in terms of tCO2 equivalent per KWh eq produced. CO2 emissions index decreases due to the switch to natural gas in fuel mix and due to reduction of oil (-18%) and diesel (-14%) use.
248		Other: ktoe	0.4	Increase	Scope 1 - Exploration & Production KPI, expressed in terms of tCO2 equivalent per ktoe of oil & gas net production Due to the implementation of Flaring Down projects, equivalent CO2 emissions from flaring increase less than expected.
3.09		Other: toe electricity and heat production	12.5	Decrease	Scope 1 - Petrochemical's KPI - energy generation emission intensity, expressed in terms of tCO2 equivalent per energy production. CO2 emissions index trend is decreasing (-12.5% respect to 2009) due to the reduction in the use of fuel and the on-going energy saving projects.
1.46		Other: tonnes of ethylene production	6.3	Decrease	Scope 1 - Petrochemical's KPI -ethylene production emission intensity, expressed in terms of tCO2 equivalent per production. Due to the implementation of energy saving interventions, equivalent CO2 emissions don't increase even if the increasing of production.
15.77		Other: MSm3 trasported gas	0.4	Decrease	Scope 1 - -G-as Transmission/Distribution KPI, expressed in terms of tCO2 equivalent per transported gas volume. The emission index is decreased (-0.4%) with respect to 2009 due to the energy consumption sustained in order to meet demand: this resulted in both an increase in the amounts of gas to introduce within the transportation network (+8.3%) as well as a diversification in the amounts of gas introduced from the various entry points. These conditions required an increased level of utilization of the gas compression plants.

Further Information

Ref. 13.1: The 2009 historical figure was updated: Scope 1 emissions 57655763.43 metric tonnes of CO₂e; Scope 2 emissions 1796997 metric tonnes of CO₂e.
Ref. 13.4: According to eni's "GHG Accounting and Reporting Protocol" each eni division and company identifies its specific Key Performance Indicators (KPI), in relation to those metrics that are deemed most relevant to their business for measuring performance against eni's climate change strategy.

Page: 14. Emissions Trading

14.1

Do you participate in any emission trading schemes?

Yes

14.1a

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 CO ₂ e	Details of ownership
European Union ETS	Sat 01 Jan 2005 - Mon 31 Dec 2007	77247755	0	70072025	Facilities we own and operate
European Union ETS	Tue 01 Jan 2008 - Mon 31 Dec 2012	131094110	988276	76024548	Facilities we own and operate

14.1b

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

In order to comply with and manage the Emissions Trading Scheme, it was necessary to develop a group-wide organization at single site level up to the business units and finally consolidated at the corporate level. The Emissions Trading scheme is coordinated by the Corporate Health, Safety, Environment and Quality Dept. (HSEQ) that draws up a centralized transaction plan for trading allowances among eni's installations in order to achieve optimal use of the credits and minimize external transactions. On a quarterly basis, eni corporate HSEQ function coordinates the Greenhouse Gas Management Team composed of the business lines HSE managers, the Financial Department and, starting from 2009, the Planning & Control Department and the Accounting and Financial Statements Department. The Team is responsible for the yearly approval of the Transaction Plan. The Financial Department is in charge of implementing the EUA trading in line with the approved Transaction Plan.

In addition to participating in the European Emission Trading system, eni is developing, in its industrial activities worldwide, a portfolio of reduction projects based on the Kyoto flexible mechanisms (Clean Development Mechanism and Joint Implementation). As such, eni is leveraging on its widespread presence in developing countries to export environmentally-friendly technology and obtain corresponding emissions reduction certificates which will be more and more useful for its European installations.

Eni considers carbon as a fundamental factor for assessing investments in order to include the cost of eventual reduction measures at the very beginning of investment decision process.

In the medium to long term, in the light of EU Emissions Trading II Phase (2008-2012), a much more severe III Phase (2013-2020), and the New Energy Policy for Europe (EPE, 20% minimum reduction in greenhouse gases by 2020 compared to 1990), eni estimates the carbon price for the period 2008-2020 within its Reference Scenario, which provides the business lines with an outlook for all the energy-related strategic variables. Specifically, the forecasts of the equilibrium carbon prices are determined on a regular basis through a market model based on European Emissions Trading and Kyoto framework fundamentals (EUA and CER/ERU supply/demand, economic growth, electricity generation capacity, weather, political sentiment, etc.).

From an operative point of view, in the case of assets subject to EU-ETS, eni performs an investment analysis which also considers the carbon price.

In a medium term perspective eni is evaluating the impact on his own business of the EU ETS III phase (2013-2020), where allowances will be mostly allocated through auction process rather than for free. In particular, no allowances will be allocated free of charge for electricity production, whereas sectors (i.e. refining and petrochemical) exposed to a carbon leakage risk will receive allowances for free based on ambitious benchmarks.

With regard to the definition of benchmarks for free allocation by the Commission, eni has strictly collaborated with national and international Associations recognised as primary Stakeholders (CONCAWE, EUROPIA, CEFIC, IETA) in order to identify the most efficient benchmarks.

To cope with Emission Trading III phase challenges, eni is rethinking its own carbon strategy. In particular, it will be developed a new centralized model, in which Eni Trading&Shipping, a company within eni, will be in charge to manage the free allowances eni portfolio and to buy on external market the remaining allowances needed for the compliance.

Moreover, eni is involved in the revision of the State Aid Guidelines for adopting financial measures in favour of sectors determined to be exposed to a significant risk of carbon leakage due to costs relating greenhouse gas emissions passed on in electricity prices. On this matter, eni is collaborating with industrial sector Associations and Confindustria, with the aim of clarifying the needs of the financial compensations and trying to define the fair amount of the subsidy, based on energy efficiency principle.

Finally, with regard to other cap and trade schemes, eni is monitoring the Australian Carbon Pollutant Reduction Scheme (CPRS) which would have been introduced in 2010, but it was delayed at least to 2013, waiting for a greater clarity on the global climate action of other major economies including the US, China and India.

The formerly-proposed CPRS provide for a first pilot year, in which an unlimited number of permits will be available to liable entities at a fixed price of 10 \$/tonCO₂. Full trading, including being able to surrender eligible international emissions units, could commence in 2014-15 with a transitional price cap in place. The majority of Australian emissions units will be sold at the CPRS auction held on a monthly basis.

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

Yes

14.2a

Please complete the following table

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 retired	Purpose e.g. compliance
Credit Origination	Fugitive	Recovery of associated gas that would otherwise be flared at Kwale oil-gas processing plant, Nigeria	CDM	1496934	0	No	Compliance
Credit Purchase	HFCs	Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride. Project 0838: GHG emission reduction by thermal oxidation of HFC 23 at Navin Fluorine International Limited (NFIL), Surat, Gujarat, India	CDM	79750	79750	Yes	Compliance
Credit Purchase	N2O	Project 0099: N2O Emission Reduction in Onsan, Republic of Korea	CDM	79775	79775	Yes	Compliance
Credit Purchase	N2O	Project 0116: N2O Emission Reduction in Paulínia, SP, Brazil	CDM	221459	221459	Yes	Compliance
Credit Purchase	N2O	Project 0557: Catalytic N2O Abatement Project in the Tail Gas of the Nitric Acid Plant of the Pakarab Fertilizer Ltd (PVT) in Multan, Pakistan	CDM	108750	108750	Yes	Compliance
Credit Purchase	HFCs	Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride. Project 0115: GHG emission reduction by thermal oxidation of HFC 23 at refrigerant (HCFC-22) manufacturing facility of SRF Ltd, India	CDM	18168	18168	Yes	Compliance
Credit Purchase	HFCs	Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride. Project 0232: Shandong Dongyue HFC23 Decomposition Project , China	CDM	15180	15180	Yes	Compliance
Credit Purchase	HFCs	Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride. Project 0868: No.2 HFC-23 Decomposition Project of Zhejiang Juhua Co., Ltd, P. R. China.	CDM	3925	3925	Yes	Compliance

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 retired	Purpose e.g. compliance
Credit Purchase	N2O	Project 1083: N2O decomposition project of Henan Shenma Nylon Chemical Co., Ltd	CDM	3004	3004	Yes	Compliance
Credit Purchase	N2O	Project 1238: N2O decomposition project of PetroChina Company Limited Liaoyang Petrochemical Company, China	CDM	7915	7915	Yes	Compliance
Credit Purchase	HFCs	Project 0767: HFC23 Decomposition Project at Zhonghao Chenguang Research Institute of Chemical Industry, Zigong, SiChuan Province, China	CDM	58523	58523	Yes	Compliance
Credit Purchase	HFCs	Project 0550: Project for HFC23 Decomposition at Limin Chemical Co., Ltd. Linhai, Zhejiang Province, China	CDM	50000	50000	Yes	Compliance
Credit Purchase	Wind	Project 0299: Guangdong Nan'ao Huaneng 45.05MW Wind Power Project, China		2329	2329	Yes	Compliance

Page: 15. Scope 3 Emissions

15.1

Please provide data on sources of Scope 3 emissions that are relevant to your organization

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
Use of sold products	268438000	Eni usually estimates the GHG indirect emissions generated by the use of sold hydrocarbon products on the basis of sales multiplied by the relevant average emission factors assuming their complete combustion. GHG emissions are estimated by multiplying the amount of oil products (46,80 million toe) and natural gas (75810 million m3) sold to customers, by the relevant average emission factors.	
Purchased goods and	268729	Engines emissions are calculated based API Compendium	

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
services		methodologies, on fuel consumption and Equipment specific combustion emission factors; flaring and venting emissions are also calculated based on the API Compendium	
Business travel	30590	Eni refers to US-EPA Climate Leaders/ Optional Emissions from Commuting, Business Travel and Product Transport, may 2008. The activity data (distance, transport type, number of travels) are provided internally by Human Resources Business Travel Management. COVERAGE: 46% of the total employees. Eni, in order to reduce environment impact from business travel, eni is encouraging videoconferencing system in order to reduce GHG emissions. Starting from 2005, Eni headquarters rely on 630 fixed videoconferencing systems in meeting rooms and 370 portable systems for smaller employee groups meetings. Videocall integrated with the VoIP phone system is also available for many users in Eni (2,000 webcam on 30,000 IP phones in 2009; 4,000 expected in 2010)	
Other: Outsourced/contracted activities			According to WBCSD/WRI GHG protocol, the reporting of Scope 3 emissions is optional, therefore eni has decided to extend gradually our reporting boundary to Scope 3 emissions from suppliers activities carried out for eni. Also for 2011, eni joined the Carbon Disclosure Project-Supply Chain initiative in order to increase the awareness of its organization's carbon footprint, moving beyond the measurement of direct GHG emissions to include climate change risks and opportunities across the supply chain and the relevant indirect emissions. The main objective is to better understand how suppliers are addressing climate change and working to reduce their greenhouse gas emissions, and account the indirect emission of eni for some selected suppliers. CDP supports the program members to encourage the suppliers to measure and disclose climate change information, in order to drive action on climate change amongst both purchasing companies and their suppliers In order to define a consistent accounting and reporting system for scope 3/suppliers emission, the main followed steps are:

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
			<p>Selection of significant outsourced activities and materials that impact in terms of GHG emissions; Identification of the main contractors list that impact on Company's Climate Change Strategy and request of GHG emission associated with the Company's outsourced activities; Definition of specific KPIs per each activity sector. The eni's suppliers involved in the CDP-SC 2010 are selected according to the following criteria: - Product/service categories with relevant environmental impact in terms of GHG emissions; - Spending share; - Qualification and size; - Investor CDP Questionnaire participation and HSE/Sustainability Policy. Moreover, eni is verifying the applicability of WBCSD-WRI "Scope 3 Accounting and Reporting Standard", reviewed draft, November 2009, to eni GHG reporting.</p>

15.2

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

Verification or assurance complete

15.2a

Please indicate the proportion of your Scope 3 emissions that are verified/assured

More than 90% but less than or equal to 100%

15.2b

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

Type of verification or assurance	Relevant standard	Relevant statement attached
Limited assurance (qualified)	ISAE 3000	Eni Annual Report 2010, pagg 250-251 http://www.eni.com/en_IT/attachments/publications/reports/reports-2010/Annual-Report-2010.pdf

15.3

How do your absolute Scope 3 emissions for the reporting year compare to the previous year?

Decreased

15.3a

Please complete the table

Reason	Emissions value (percentage)	Direction of Change	Comment
Other: Sales reduction	3.4	Decrease	2009 Scope 3 Emissions value has been revised to 277.79 minton CO2eq. In 2010 emissions decreased due to the reduction of natural gas sales (- 9.5%)
Emissions reduction activities			Confirming its commitment to the mitigation of climate changes, in 2010 Eni entered the initiative promoted by the Carbon Disclosure Project in the Supply Chain that will contribute to assessing and managing risks and opportunities related to climate change in the supply chain in order to better direct its choices and measures, in addition to increasing awareness of its carbon footprint, including also indirect emission of greenhouse gas generated by contracted activities. In 2011, by joining to CDP Supply chain, Eni's objective is to continue to collect data and information about emissions, strategies, targets and policies of suppliers in relation to climate change, in order to develop a control system aimed at reducing the indirect Scope 3 emissions.

Further Information

Scope 3: Use of sold goods and services In accordance with WBCSD/WRI GHG Protocol Initiative, eni usually estimates the GHG indirect emissions generated by the use of sold hydrocarbon products. The GHG estimation is made on the basis of sales multiplied by the relevant average emission factors.

Scope 3: Business Travel In 2009 eni developed a methodology to estimate the indirect GHG emission from business travel. In 2010 eni's employees are 79,141 working in 77 Countries, in several activity sectors/Companies. To track the worldwide business travels is difficult. The eni HR business travel management system

accounts data for each travel per passenger necessary for the GHG emission calculation. The applied average emission factors are derived from the US_EPA GHG Inventory Protocol/Optional Emissions from Commuting, Business Travel and Product Transport, may 2008. 2009 is first reporting year, the calculation was developed on the basis of data provided by Human Resources Business Travel Management, and the coverage is the 46% of the total employees. The employees of some abroad affiliates are not included because they don't use the above mentioned accounting tool. Our expectation is that the larger number of travels regards the Companies headquarter employees in order to reach the production fields and sites, they are consolidated in developed calculation. The leasing cars are excluded from the estimation, because no data are available at eni corporate level. The calculated figures (about 30,600 tCO2e/y) confirm that this GHG emission contribution is negligible in relation to other emissions associated with eni business. In order to reduce the indirect GHG emissions from business travel, eni is encouraging the use of videoconferencing system

Attachments

[https://www.cdproject.net/Sites/2011/34/5634/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/15.Scope3Emissions/Extract Annual-Report-2010.pdf](https://www.cdproject.net/Sites/2011/34/5634/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/15.Scope3Emissions/Extract%20Annual-Report-2010.pdf)

Module: Oil & Gas

Page: Oil & Gas 0

OG0.1

Please enter the dates for the periods for which you will be providing data. We ask for historic data for the year ending in 2005 to the year ending in 2010 and a forecast for the year ending in 2011

Year ending	Date range
2005	Sat 01 Jan 2005 - Sun 01 Jan 2006
2006	Sun 01 Jan 2006 - Mon 01 Jan 2007
2007	Mon 01 Jan 2007 - Tue 01 Jan 2008
2008	Tue 01 Jan 2008 - Thu 01 Jan 2009
2009	Thu 01 Jan 2009 - Fri 01

Year ending	Date range
	Jan 2010
2010	Fri 01 Jan 2010 - Sat 01 Jan 2011
2011	Sat 01 Jan 2011 - Sun 01 Jan 2012

Page: Oil & Gas - Production & reserves by hydrocarbon type

OG1.1

Please provide values for annual production of each of the hydrocarbon types (in units of BOE) for the years given in the following table. The values required are aggregate values for the reporting organization. The values for 2011 are forward-looking estimates

Product	2005	2006	2007	2008	2009	2010	2011
Natural gas	228490000	252215000	261340000	281219087	278040752	298576577	
Other: Liquids	405515000	393835000	372300000	374490000	367555000	363905000	

OG1.2

Please provide values for proved reserves of each of the hydrocarbon types (in units of BOE) for 2010. The values required are aggregate values for the reporting organization

Product	Proved reserves (BOE), 2010	Date of assessment
Natural gas	3221981982	Fri 31 Dec 2010
Other: Liquids	3623000000	Fri 31 Dec 2010

Further Information

Reference: Eni Annual Report 2010, pag 7 http://www.eni.com/en_IT/attachments/publications/reports/reports-2010/Annual-Report-2010.pdf

Ref OG 1.1, OG 1.2 - From April 1, 2010, the natural gas conversion factor from cubic feet to boe has been updated to 1 barrel of oil = 5,550 cubic feet of gas (it was 1 barrel of oil = 5,742 cubic feet of gas)

Page: Oil & Gas - Emissions by segment in the O&G value chain

OG2.1

Please indicate the consolidation basis (financial control, operational control, equity share, Climate Change Reporting Framework Part 1) used to report the Scope 1 and Scope 2 emissions by segment in the O&G value chain. Further information can be provided in the text box in OG2.2

Segment	Consolidation basis for reporting Scope 1 emissions	Consolidation basis for reporting Scope 2 emissions
Exploration, production & gas processing	Operational Control	Operational Control
Storage, transportation & distribution	Operational Control	Operational Control
Speciality operations	Operational Control	Operational Control
Refining	Operational Control	Operational Control

OG2.2

Please provide clarification for cases in which different consolidation bases have been used and about the level/focus of disclosure. For example, a reporting organization whose business is solely in storage, transportation and distribution (STD) may use the text box to explain why only the STD row has been completed

N/A

OG2.3

Please provide masses of gross Scope 1 GHG emissions in units of metric tonnes CO₂e for the organization's owned/controlled operations by value chain segment. The values required for 2011 are forward-looking estimates

Segment	2005	2006	2007	2008	2009	2010	2011
Exploration, production & gas processing	32536726	30897027	36311572	33214104	29692079	31223404	
Storage, transportation & distribution	4032000	4278232	3950382	3924336	3530153	3985683	

Segment	2005	2006	2007	2008	2009	2010	2011
Speciality operations	14091573	14862147	17272651	15580581	15696288	16451181	
Refining	8115300	7911194	8423211	7739438	7290197	7756953	

OG2.4

Please provide masses of gross Scope 2 GHG emissions in units of metric tonnes CO₂e for the organization's owned/controlled operations by value chain segment. The values required for 2011 are forward-looking estimates

Segment	2005	2006	2007	2008	2009	2010	2011
Exploration, production & gas processing					159399	168741	
Storage, transportation & distribution					68819	64139	
Speciality operations					929539	1019915	
Refining					473879	562223	

Further Information

Ref OG2.3 & OG2.4: Since 2004, eni has adopted an own GHG Accounting and Reporting Protocol for the monitoring of worldwide GHG emissions, applicable to each eni sectors. The above data are grouped in the following category:

"Exploration, production & gas processing" includes Eni Exploration & Production Division emissions;

"Refining" includes Eni Refining & Marketing Division emissions;

"Storage, transportation & distribution" includes the eni Companies: Snamretegas, Italgas, Stogit, Scogat and Sergaz (activities: gas transmission and distribution, gas storage);

"Speciality operations" includes Eni Petrochemical and Power generation emissions

In 2011 CO₂ equivalent calculation formula eni includes only CO₂ and CH₄ emission, but the accounting and reporting procedure for the other GHGs is improved and eni will evaluate if extend the list of GHG included in the CO₂ eq. estimation.

OG3.1

Please confirm the consolidation bases (financial control, operational control, equity share, Climate Change Reporting Framework Part 1) used to report Scope 1 emissions by emissions category

Segment	Consolidation basis for reporting Scope 1 emissions by emissions category
Exploration, production & gas processing	Operational Control
Storage, transportation & distribution	Operational Control
Speciality operations	Operational Control
Refining	Operational Control

OG3.2

Please provide clarification for cases in which different consolidation bases have been used to report by emissions categories (combustion, flaring, process emissions, vented emissions, fugitive emissions) in the various segments

N/A

OG3.3

Please provide masses of gross Scope 1 GHG emissions released to atmosphere in units of metric tonnes CO2e for the whole organization broken down by emissions categories: combustion, flaring, process emissions, vented emissions, fugitive emissions. The values required for 2011 are forward-looking estimates

Category	2005	2006	2007	2008	2009	2010	2011
Combustion	20525922	37427873	39428218	37370878	36657105	39092381	
Flaring	18694397	15614058	20070000	16535835	13730862	13827931	
Process emissions							
Vented emissions	2172664	2463490	2190000	2390697	2182202	2340032	
Fugitive emissions	3263660	5213532	5735024	5697802	5085594	5415779	

Further Information

Note: Process Emissions are consolidated in category "Combustion"

OG4.1

Please indicate the consolidation basis (financial control, operational control, equity share, Climate Change Reporting Framework Part 1) used to report transfers and sequestration of CO2 emissions

Activity	Consolidation basis
Transfers	
Sequestration of CO2 emissions	

OG4.2

Please provide clarification for cases in which different consolidation bases have been used (e.g. for a given activity, capture, injection or storage pathway)

OG4.3

Using the units of metric tonnes of CO2, please provide gross masses of CO2 transferred in and out of the reporting organization (as defined by the consolidation basis). Please note that questions of ownership of the CO2 are addressed in OG4.5

Transfer direction	2005	2006	2007	2008	2009	2010
CO2 transferred in						
CO2 transferred out						

OG4.4

Please provide clarification on whether any oil reservoirs and/or sequestration system (geological or oceanic) have been included within the boundary of the reporting organization. Provide details, including degrees to which reservoirs are shared with other entities

OG4.5

Please explain who (e.g. the reporting organization) owns the transferred emissions and what potential liabilities are attached. In the case of sequestered emissions, please clarify whether the reporting organization or one or more third parties owns the sequestered emissions and who has potential liability for them

OG4.6

Please provide masses in metric tonnes of gross CO2 captured for purposes of carbon capture and sequestration (CCS) during the reporting year according to capture pathway. For each pathway, please provide a breakdown of the percentage of the gross captured CO2 that was transferred into the reporting organization and the percentage that was transferred out of the organization (to be captured)

Capture pathway in CCS	Captured CO2 (metric tonnes CO2)	Percentage transferred in	Percentage transferred out

OG4.7

Please provide masses in metric tonnes of gross CO2 injected and stored for purposes of CCS during the reporting year according to injection and storage pathway

Injection and storage pathway	Injected CO2 (metric tonnes CO2)	Percentage of injected CO2 intended for long-term (>100 year) storage	Year in which injection began	Cumulative CO2 injected and stored (metric tonnes CO2)

OG4.8

Please provide details of risk management performed by the reporting organization and/or third party in relation to its CCS activities. This should cover pre-operational evaluation of the storage (e.g. site characterisation), operational monitoring, closure monitoring, remediation for CO2 leakage, and

results of third party verification

OG5.1

Please provide values for annual sales of the hydrocarbon types (in units of BOE) for the years given in the following table. The values required are aggregate values for the reporting organization. The values for 2011 are forward-looking estimates

Product	2005	2006	2007	2008	2009	2010	2011
Other: Hydrocarbon production sold	614900000	625100000	611400000	632000000	622800000	638000000	
Natural gas (excluding LNG)	579391500	603315000	608604000	641014500	637878000	617301600	
Liquefied natural gas (LNG)	43050000	60885000	71955000	73800000	79335000	95400000	
Other: Liquids	405515000	393835000	372300000	374490000	367555000	363905000	

OG5.2

Please provide estimated emissions intensities associated with each hydrocarbon type based on the current production and operations

Year ending	Hydrocarbon type	Emissions intensity: exploration, production & gas processing (metric tonnes CO2e per thousand BOE)	Emissions intensity: storage, transportation & distribution (metric tonnes CO2e per thousand BOE)	Emissions intensity: refining (metric tonnes CO2e per thousand BOE)
2009	Natural gas (excluding LNG)	0.008		
2009	Other: Conventional Oil	0.038		

OG5.3

Please clarify how each of the emissions intensities has been derived and supply information on the methodology used where this differs from information already given in answer to the methodology questions in the main information request

For the purpose of calculation of 2009 100% operated CO2 eq indicator for gas and conventional oil, the concept of “main product” has been adopted. This means that for each installation “main production” has been identified and all emissions generated by that installation have been considered as emissions related to “main product”. This is because it is not possible to identify the portion of emissions related to different products (oil is always associated to gas production); Refining: not available because the refining sector doesn't calculate the KPI per different product type;

Further Information

Ref. OG5.1

- Hydrocarbon Production sold = refers to Eni Factbook 2010 (page 110) – total production sold (excluding own consumptions);

- Natural gas: refers to Eni Factbook 2010 (page 110) – Worldwide Natural Gas sales in 2010: 97060000000 mc

From April 1, 2010, the natural gas conversion factor from cubic feet to boe has been updated to 1 barrel of oil = 5,550 cubic feet of gas (it was 1 barrel of oil = 5,742 cubic feet of gas);

- LNG: refers to Eni Factbook 2010 (page 52) - LNG Sales in 2010: 15000000000 mc.

Eni LNG Sales data include sales of the G&P Division (also included in worldwide gas sales) and the Exploration & Production Division

- Liquids: average daily production, multiplied by 365 (assuming 100% hydrocarbon liquids sold)

Page: Oil & Gas - Strategy for development of non-fossil fuel products

OG6.1

Does your organization have a strategy for the development of renewable and clean energy technologies?

Yes

OG6.1a

Please provide details

e&p division is committed to work on energy efficiency, both in existing plants and in new projects. To pursue this end, an Energy Management Methodology is being developed aimed at identifying the main energy losses in a plant through key parameter measurements. In order to effectively reduce the losses detected and the related excess carbon emissions, the division has investigated a large number of clean technologies such as heat waste recovery systems, use of high efficiency motors to produce electricity, etc.

Moreover, it has to be noted that renewable energy can easily be adopted in most of the host countries to improve their energy sustainability. Integration of solar energy systems with diesel/gas generators to run facilities in remote areas (e.g. desert areas) is a valid and concrete example.

Finally, eni is focussed on backing both the Italian and European regulators in implementing a support framework to remove obstacles to the full development of

CCS technology for the geological storage of carbon dioxide. In 2008, eni signed a strategic cooperation agreement with Enel for the joint development of CCS technologies aimed at accelerating the implementation of the entire technology package required for the capture, transfer and confinement of carbon dioxide. A joint pilot project is ongoing.

The above actions are directly linked to the Kyoto Protocol flexible mechanisms - such as the European Emissions Trading Scheme (EU ETS) and the Clean Development Mechanism (CDM) - in which the division is actively involved. More specifically, energy efficiency, renewables, flaring down projects and CCS, could also be valued in terms of carbon credits.

OG6.1b

Financial contribution of renewable and clean energy technologies, including CCS - sales generated

Technology area	2007	2008	2009	2010

OG6.1c

Financial contribution of renewable and clean energy technologies - Investment (capital expenditure + research & development)

Technology area	2007	2008	2009	2010

OG6.1d

Financial contribution of renewable and clean energy technologies - Earnings Before Interest, Taxation Depreciation, Amortization (EBITDA)

Technology area	2007	2008	2009	2010

OG6.1e

Financial contribution of renewable and clean energy technologies - net assets

Technology area	2007	2008	2009	2010

OG6.1f

Financial contribution of renewable and clean energy technologies - please provide a short description of the technologies

Please select the technology	Please provide short description of technology
Other: Energy efficiency	Organic Rankine Cycle (ORC) Technology for Energy Recovery: a feasibility study has been completed and the installation of Organic Fluid Cycle is underway in the gas powered Fano power station in Italy (3 MW) by recovering the thermal power dissipated by turbocompressors. This would represent the first application of the ORC technique in the eni Group.
Other: Renewables	Feeding pumps in desert areas with photovoltaic devices: a contract has been prepared and the engineering is underway for the supply of photovoltaic systems to be applied to diesel generators for feeding sucker rod pumps in desert areas in Egypt.
CCS	GHG programme (Green House Gases): activities are progressing in part of the pilot project for injecting CO2 in the Cortemaggiore gas storage site.

Module: Sign Off

Page: Sign Off

Please enter the name of the individual that has signed off (approved) the response and their job title

Carbon Disclosure Project