CDP 2016 Climate Change 2016 Information Request Eni SpA

**Module: Introduction** 

Page: Introduction

CC0.1

#### Introduction

Please give a general description and introduction to your organization.

Eni is an integrated company that operates across the entire energy chain in 66 Countries around the world.

Eni's solid portfolio of conventional oil assets with competitive costs as well as the resource base with options for anticipated monetization, ensure high value generation from Eni's upstream activity. The large presence in the gas and LNG markets, and thecommercial know-how enable the company to capture synergies and catch joint opportunities and projects in the hydrocarbon value chain.

Eni's strategies, resource allocation processes and conduct of day-by-day operations underpin the delivery of sustainable value to shareholders and, more generally, to all of stakeholders, respecting the Countries where the company operates and the people who work for and with Eni. Eni's way of doing business, based on operating excellence, focus on health, safety and the environment, is committed to preventing and mitigating operational risks.

# CC0.2

#### **Reporting Year**

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

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

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

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

# CDP

#### Enter Periods that will be disclosed

Thu 01 Jan 2015 - Thu 31 Dec 2015

# CC0.3

# Country list configuration

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

Select country
Italy
United States of America
Australia
China
Austria
Belgium
Croatia
Cyprus
Czech Republic
France
Germany
Greece
Hungary
Ireland
Luxembourg
Netherlands
Norway
Portugal

# Select country

Romania
Slovakia
Slovenia
Spain
Switzerland
Turkey
United Kingdom
Algeria
Angola
Egypt
Gabon
Ghana
Morocco
Mozambique
Nigeria
Tunisia
Timor Leste
India
Indonesia
Iran, Islamic Republic of
Iraq
Kazakhstan
Kuwait
Malaysia
Oman
Pakistan
Russia
Saudi Arabia
Singapore
Taiwan
Turkmenistan
Ukraine
United Arab Emirates

#### Select country

Vietnam
Argentina
Canada
Ecuador
Mexico
Trinidad and Tobago
Venezuela
Congo, Republic of the
Myanmar
Greenland
Kenya
Libya
Liberia
South Africa
South Korea

#### CC0.4

#### **Currency selection**

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

EUR(€)

#### CC0.6

#### Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire. If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net. If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx.

#### **Further Information**

#### **Module: Management**

#### Page: CC1. Governance

#### CC1.1

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

Board or individual/sub-set of the Board or other committee appointed by the Board

#### CC1.1a

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

Since 2014, Eni's Bord of Directors (BoD) has established the "Sustainability and Scenarios Committee" (composed by five non-executive members of the BoD and replacing the "Oil-Gas Energy Committee"), with the aim of ensuring the highest possible commitment on all sustainability issues, including climate change. The "Sustainability and Scenarios Committee" evaluates climate performance and objectives in meetings with Executives from Sustainability, Scenarios and HSEQ departments.

In addition, Eni's BoD - together with its "Control and Risk Committee" (composed by four non-executive Directors) - defines the guidelines for the management of the main business risks, including risks related to the climate change.

The CEO is the subject responsible for the design, implementation and management of the Internal Control and Risk Management System in line with the BoD risk guidelines. "Management System Guideline for Integrated Risk Management" were issued in December 2012 and governs the various phases and activities of the Integrated Risk Management (IRM) process, identifying the roles and responsibilities of the main actors involved in the process. Regarding climate risks, the Health, Safety, Environment and Quality Executive Vice President acts as risk owner for Climate Change issue and works in conjunction with the Sustainability, Regulatory Affairs and Research and Development departments in identifying, assessing and monitoring risks related to climate change.

The results of the IRM process are presented to the Risk Committee, formed by all the managers that reports directly to the CEO, who chairs the Committee. IRM results are also presented to the BoD at least semiannually in order to let the Board evaluate the adequacy and effectiveness of the Internal Control and Risk Management System and the compatibility of the risks profile with Eni's strategic objectives.

For more info: https://www.eni.com/en\_IT/company/governance/committees-of-the-board-of-directors.page

# CC1.2

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

Yes

# CC1.2a

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

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	Eni's 2016 Remuneration Policy includes GHG mitigation objectives. In particular, 25% of annual variable monetary incentive of Eni's CEO is linked with "Environmental Sustainability and Human Capital Performance" and these refers to targets related to CO2 direct emissions intensity reduction and total recordable accident frequency rate (TRIR). For more info: https://www.eni.com/docs/en_IT/enicom/company/governance/remuneration-report-2016.pdf (Eni Remuneration Report 2016, pag. 17).
Management group	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction	A component of Eni's management monetary incentive is linked to sustainability objectives, including indicators related to GHG, emission reduction targets and energy efficiency activities.

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
		target Efficiency project Efficiency target	

# **Further Information**

# Page: CC2. Strategy

# CC2.1

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

Integrated into multi-disciplinary company wide risk management processes

# CC2.1a

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

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	Worldwide	> 6 years	Eni has developed and adopted a model for Integrated Risk Management (IRM) that targets to achieve an organic and comprehensive view of the Company main risks, greater consistency among internally-developed methodologies and tools to manage risks and a strengthening of the organization awareness, at any level, that suitable risk evaluation and mitigation may influence the delivery of Corporate targets and value. Climate Change is one of the top risks considered in the IRM. The IRM has been defined and updated consistently with international principles and best practices. It is an integral part of the Internal Control and Risk Management System and is structured on three control levels: the risk owners, the risk control functions and the independent assurance provider. For more info: https://www.eni.com/en_IT/investors/strategy/managing-business-risks.page

#### CC2.1b

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

Eni has developed and adopted a model for Integrated Risk Management (IRM) that targets to achieve an organic and comprehensive view of the Company main risks, greater consistency among internally - developed methodologies and tools to manage risks and a strengthening of the organization awareness, at any level, that suitable risk evaluation and mitigation may influence the delivery of Corporate targets and value. As mentioned in the previous answers, Climate Change is one of the top risks considered in the IRM.

At Corporate level, the identification of climate change risks and opportunities are in charge of the climate change risk owner (EVP Health, Safety, Environment and Quality), whose responsibility lies in risk identification and related treatment measures. Regarding regulatory risks and opportunity, EVP HSEQ carries out a constant monitoring of new regulations, actively attends the technical discussions of trade associations, coordinates the activities of impact analysis and the ones for individual dossiers positioning.

At Asset level, Eni developed dedicated risk assessment guidelines and procedures such as the "Exposure to Risk" (EtR) methodology with the aim of assessing the maximum potential economic losses two to damage to assets in production operations. Physical risks such as extreme weather conditions are covered in the procedure and algorithm for calculating the impacts.

For more info: https://www.eni.com/en\_IT/investors/strategy/managing-business-risks.page

#### CC2.1c

#### How do you prioritize the risks and opportunities identified?

In Eni the process of prioritization is performed at corporate level through the use of multi-dimensional matrices, in which the different kind of impacts (financial, environmental, social, reputational etc.) are quantified along with their probabilities of occurrence (from rare to probable). All the risks analysis (also climate change ones) are declined in terms of inherent and residual risks, in accordance with the implemented mitigation measures. After these quantitative analysis the risks are segmented into three groups (tier 1, tier 2 and tier 3) with different relevancy.

#### CC2.1d

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

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

Is climate change integrated into your business strategy?

Yes

# CC2.2a

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

#### OUR VISION

Eni acknowledges the challenge posed by climate change and the need to limit the temperature increase to 2°C. However, demand for energy will continue to grow in the coming decades, driven by demographic and economic development in emerging economies.

Renewable energies will have an increasingly important role in the energy supply but cannot immediately replace hydrocarbons due to various technical and

economical limits. Natural gas, in particular, will continue to meet a key part of global energy demand, even in a lower carbon intensity scenario. Eni long-term vision is that the energy industry will have to face a dual challenge:

- to ensure that the entire world population, that will increase from 7 to 10 billion people by 2050, will have access to cheap energy, and

- to guarantee that this happens in an environmentally sustainable way, limiting the increase of temperature to below 2°C.

#### OUR STRATEGY

Consistent with this vision, Eni has established an integrated strategy to actively contribute to the energy transition based on three fundamental pillars: 1. to produce low carbon impact hydrocarbons ensuring that all our operations are characterized by maximum efficiency and lower CO2 content. Between 2010 to 2015, we reduced direct CO2 emissions by 28%, equivalent to 16.6 million tons of CO2

2. to maximise the use of gas as a fuel of choice in a scenario of decarbonisation, particularly for electricity generation, but also increasingly for transport. Natural gas comes is the fossil fuel with the lowest carbon content and has a flexibility in electricity production that allows it to be complementary to the typically intermittent production of renewable sources. Today, 58% of Eni's portfolio is made up of natural gas and development plans in Mozambique, Egypt and Indonesia confirm Eni's commitment on this front.

3. to promote the development of renewable energies, supporting their spread in the countries where we operate, and stimulating technological research.

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i) Starting from 2014, "Sustainability and Scenarios Committee" of Eni's BoD evaluates climate performance and objectives. From 2015, the achievement of CO2 reduction target is part of the variable annual remuneration incentive of the CEO and climate risks are addressed in the Integrated Risk Management process, aimed to evaluate the compatibility of risk profiles with the strategic objectives. In 2015 Eni launched a special internal initiative called Climate Change Programme, aimed at improving the company GHG performances.

ii) The main drivers that are influencing Eni's strategy are the outcomes of COP21 and the carbon pricing debate; the economic and environmental advantages of flaring down, energy efficiency and methane fugitive reduction; risk and opportunities arising from climate change and the increase of low carbon and green products and renewables demand.

iii) Eni's short term (<5 years) strategy pillars are: active role in climate debate, carbon risk/opportunity assessment, flaring down initiatives, methane fugitives reduction campaigns and operational energy efficiency measures.

iv) Eni's long term (≥5 years) strategy pillars are: promotion of natural gas, development of green downstream technologies and products, commercial renewables, research on breakthrough low carbon technologies and adaptation to physical risks of climate change. The increasing share of natural gas in production and reserve portfolio copes with Eni's view on natural gas as key means for reducing emissions in the power business and in the transportation. With reference to green technologies and products, Eni is investing in the changeover of the traditional downstream business. In particular, Eni converted the traditional refinery of Venice (Italy) into a modern bio-refinery, where, thanks to Eni's Ecofining<sup>™</sup> technology, Eni started the production of bio-diesel through the processing of 1st and 2nd generation vegetable feedstock. With the same approach Eni is planning to convert also the Gela refinery. As per physical risks of climate change, Eni has always addressed major hazards induced by climate extreme events (hurricanes, storms, drought, sea level rise etc.). Eni structural requirements are compliant with international standards and reviewed according to new results. The designed structures have a sufficient strength to overcome the highest environmental extreme impacts and are customized based on the particular environmental phenomena experienced across the regions in which Eni operates (e.g. Goliat FPSO in Norway).

v) Eni's production and reserve portfolio is more robust than other peers in relation to climate policy uncertainties and even in a low carbon scenario such the IEA 450 there are no sensible impacts on the assets value. Indeed, conventional hydrocarbons account for 99% of the 2015 Eni equity production and most of the resource base. Moreover, proven reserves are made up 48% by gas and this percentage increases in reference to probable and possible reserves. Eni has the most efficient cost structure among the peers with less than 20 \$/bbl (18 €/bbl). The exploration success, with almost 12 billion boe resources discovered since 2008 at a

unit cost of 1.2 \$/bbl, has granted the lowest unit cost of development and operating expenditures. In addition the innovative investments in green downstream technologies and products will enable Eni to cope with future increase of the market demand of green products. Finally, research on polymeric solar technologies can enable Eni to get strategic know-how on future breakthrough energy technologies.

vi) In 2015 to date, major business decisions related to climate change were the following:

- In April 2015 Eni launched a special internal initiative called Climate Change Programme, aimed at improving the company GHG performances.

- In June 2015 Eni CEO signed a public letter calling for an international carbon pricing in the light of Paris COP 21

- In September 2015 the BoD approved the GHG Action Plan at 2025 with a -43% GHG performance index reduction target.

- In October 2015, at an event in Paris, Eni's CEO together with the CEOs of other OGCI members, launched a Joint Collaborative Declaration that announced their collaboration in the area of climate change.

- In November 2015, Eni established the new Energy Solutions Department, with the mission to complement and integrate the traditional energy sources with the production of energy from renewable sources

- In December 2015, Eni welcomed the success of Paris COP21 and joined the Paris Pledge for Action

- In March 2016, during the 2016-2019 Strategy Presentation, Eni's CEO presented our 10 year emission intensity target

- In May 2016, during the Annual Shareholders Meeting, Eni's CEO made a statement on climate change and announced a new and original model of integration between traditional business and energy from renewable sources.

CC2.2b

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

#### CC2.2c

Does your company use an internal price of carbon?

Yes

#### CC2.2d

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

Our carbon price level is set according to our carbon price scenario for the main carbon markets (e.g. EU-ETS), that we constantly monitor and cover more than 50% of our direct CO2 emissions. In addition we perform sensitivity analysis with a carbon price of 40\$ (real terms) for the main projects under development and producing assets.

## CC2.3

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

Direct engagement with policy makers Trade associations Funding research organizations Other

# CC2.3a

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

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution		
Energy efficiency	Support with minor exceptions	minor government to enforce the technical regulation as per should be carefully assessed to avoid detrimental effects			
Cap and trade	Support with minor exceptions	Eni is directly involved with the policymakers in the discussions about the structural reform of European Emission Trading Scheme (EU-ETS) and, more generally, about the debate of the European framework for climate and energy policies. In 2015 Eni took part also in the EU pubblic consultation on structural reform of EU-ETS. In addition, together with other majors European	Eni supports EU-ETS as a central pillar of the European climate policy and believes that it can drive industrial choices in favour of energy efficiency and low carbon fuels without compromising the EU's competitiveness. For this reason Eni is in favour of a structural reform of the EU-ETS and a clear framework regarding free allocation for industrial installations facing carbon leakage risk.		

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		Companies, Eni has published statements and press releases trying to address the major items of the European debate on climate and energy future strategies.	
Other: Emission Performance Standard	Support	In 2015 Eni engaged with EU policymakers and NGOs to introduce an Emission Performance Standard on European power generation.	In Eni's view an Emission Performance Standard on European power generation could help to reach the EU 2030 CO2 reduction goals. This tool should be integrated with EU-ETS and not substitutive.
Other: Carbon Pricing	Support	On 1st June 2015 Eni and other 5 major Oil&Gas companies (BG Group plc, BP plc, Royal Dutch Shell plc, Statoil ASA and Total SA) announced their call to governments around the world and to the United Nations Framework Convention on Climate Change (UNFCCC) to introduce carbon pricing systems and to a open direct dialogue on this topic with the UN and willing governments. The six companies set out their position in a joint letter from their CEOs to the UNFCCC Executive Secretary and the President of the COP21. This comes ahead of the UNFCCC's COP21 climate meetings in Paris this December.	Eni and the other companies calls to provide clear, stable, long- term, ambitious policy frameworks. This would reduce uncertainty and help stimulate investments in the right low carbon technologies and the right resources at the right pace. A price on carbon should be a key element of these frameworks. If governments act to price carbon, this discourages high carbon options and encourages the most efficient ways of reducing emissions widely, including reduced demand for the most carbon intensive fossil fuels, greater energy efficiency, the use of natural gas in place of coal, increased investment in carbon capture and storage, renewable energy, smart buildings and grids, off-grid access to energy, cleaner cars and new mobility business models and behaviors.

# CC2.3b

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

Yes

# CC2.3c

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

Trade associatio n	Is your position on climate change consiste nt with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
IPIECA	Consisten t	IPIECA (International Petroleum Industry Environmental Conservation Association) established its Climate Change Working Group (CCWG) in 1988. Since then the group has monitored the climate science and policy discussions, engaging with international governmental bodies and other stakeholders. It now also focuses on providing best practice guidance on GHG emissions monitoring, reporting and management. IPIECA members are taking action to limit GHG emissions from their operations and to help their customers to use their products more efficiently. Common approaches include: using energy more efficiently, improving drilling and production techniques, and investing in cogeneration facilities; educating consumers and others to use petroleum products more efficiently; deploying existing low carbon technologies, investing in new fuel technologies including renewables, hydrogen, biofuels and fuel cell technologies, and investing in cleaner fuels such as natural gas; reducing venting, flaring and fugitive emissions from natural gas networks; developing and implementing carbon capture and storage technology; participating in voluntary market-based initiatives and agreements that seek cost-effective reductions across diverse operations and working with research organizations, governments and other sectors to develop innovative ways of supplying energy in an environmentally sustainable manner. Regarding UN negotiations, IPIECA has developed The Paris Puzzle – a set of communications on the challenges and responses needed to address the risks of climate change, in light of the new global agreement at COP-21 in Paris, 2015, under the UN Framework Convention on Climate Change. For more info: http://www.ipieca.org/focus-area/climate-change http://www.ipieca.org/paris-puzzle	Eni's VP Environment is member of the Executive Committee of IPIECA and Eni's Climate Change Manager is Vice-chair of the Climate Change Working Group. Moreover, Eni takes actively in all the Task Forces related to climate issues (e.g. Reporting, Adaptation, Unburnable Carbon etc.). For more info: http://www.ipieca.org/governa nce
IETA	Consisten t	IETA works for the development of an active, global greenhouse gas market, consistent across national boundaries and involving all flexibility mechanisms: the Clean Development Mechanism, Joint Implementation and emissions trading; the creation of systems and instruments that will ensure effective business participation. IETA is the main voice for the business community on emissions trading, the objectives for the organization are to: promote an integrated view of the emissions trading system as a solution to Climate Change; participate in the design and implementation of national and international rules and guidelines; and provide the most up-to-date and credible source of information on emissions trading and greenhouse gas market activity. For more info: http://www.ieta.org/index.php?option=com_content&view=article&catid=19%3Adefault&id=165%3Avision &Itemid=114	Eni has been member of IETA for many years and partecipates in the EU and International Working Groups activities.

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

Yes

#### CC2.3e

#### Please provide details of the other engagement activities that you undertake

Eni is a founder member of the "Oil and Gas Climate Initiative". The Oil and Gas Climate Initiative (OGCI) is a voluntary initiative set up by Oil & Gas companies that aims to encourage practical action to contrast climate change by working together and by sharing best practices. The OGCI was set up following debates during the World Economic Forum Annual Meeting in January 2014 and was officially launched during the UN Climate Summit held in September 2014 in New York. In October 2015, the CEOs of the companies of the OGCI, during an high level and multi-stakeholder event in Paris, launched a Joint Collaborative Declaration on the subject of climate change and presenting a report of practical measures that have been undertaken to improve the management of greenhouse gases (GHG) and to contain the long-term impact on the climate (such as heavy investment into natural gas, the arrest of carbon dioxide and storage, renewable energy and research and development into technology for low GHG emissions). The members currently engaged in the initiative alongside Eni include BP, CNPC, PEMEX, Reliance Industries, Repsol, Saudi Aramco, Shell, Statoil and Total, which together represent over 20% of global energy production. The initiative is headed by the respective CEOs that take part in a Steering Committee.

Eni is member of the GGFR, a public-private partnership launched at the World Summit for Sustainable Development in August 2002. The GGFR Partnership led by the World Bank gathers together representatives from governments of oil-producing countries, state-owned and international oil companies so that they can help to remove together the barriers to gas flaring by disseminating best global practices and developing specific programmes for each country. Since November 2014, Eni supports the "Zero Routine Flaring by 2030" initiative, which unites governments, oil companies and other development organisations. In 2015 the World Bank praised Eni for its M'Boundi flaring down project in Congo.

Eni is among the first members of the Climate and Clean Air Coalition - Oil & Gas Methane Partnership (CCAC-OGMP), an initiative co-ordinated by the UNEP aimed at reducing natural gas emissions in the Oil and Gas sector. The partnership within the CCAC is based on collaboration and support between the members to find technological approaches that lead to a reduction in natural gas emissions in a flexible, systematic way, by establishing a forum for consultation and discussion among partners and communication with the public, investors NGOs and governments on the progress being made in the sector regarding natural gas emissions. The founding companies present at the UN Secretary General's Climate Summit in New York on 23 September 2014. - are BG, PEMEX, PTT, Southwestern Energy, Statoil e Total.

Eni supports the initiative Caring for Climate, promoted by the United Nations Global Compact, the secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) and by the United Nations Environment Programme (UNEP), aimed at encouraging companies to face the issue of climate change. Within this project we contribute to the Workstream projects on Carbon Pricing and Transparency and Disclosure.

Eni participates in Sustainable Energy for All, a partnerships with the academic world, civil society, national and international institutions and companies in the sector we support this United Nations initiative that aims to mobilise action towards sustainability in all areas of society.

Eni is taking part to the Task Force on Climate Related Financial Disclosures of the Financial Stability Board (FSB-TCFD), that was set up in December 2015 to develop recommendations and international guidelines on disclosure about risks connected with climate change.

#### CC2.3f

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

Eni has set up a robust organizational process in order to ensure that all activities that influence policy are consistent with the overall climate change strategy. Indeed, Eni takes part in the activities of several trade associations (related to the different businesses of Eni) that interact with national and international institutions on climate and energy regulations. Eni representatives in these associations inform constantly the central HSEQ department, which is in charge for the climate risk ownership for whole Eni. In addition, the central HSEQ and the regulatory affairs department constantly monitor regulatory evolutions in order to identify directly potential risks and opportunities.

Whenever a new regulation development is envisaged, the central HSEQ department coordinates the work to assess thoroughly risks/opportunities along with the Business Units and the other relevant departments (e.g. regulatory affairs, investor relations, O&G scenarios, planning and control, trading & shipping, sustainability). The consistency among Eni's Business Units is ensured through dedicated working groups focused on climate issues (Team Greenhouse Gas, composed by Environmental managers of Eni's subsidiaries) and energy efficiency (Energy Manager Board, composed by the Energy managers of Eni's subsidiaries). In addition, climate issues are also in the agenda of the COHSE, which is the Health Safety and Environmental Committee, composed by the HSE managers of Eni's subsidiaries. Both working groups and the COHSE committee meet at least twice a year.

Eni's positions are transmitted to the policymakers through the representatives in trade associations (indirect interaction) or the regulatory affairs department (direct interactions).

#### CC2.3g

Please explain why you do not engage with policy makers

#### **Further Information**

#### Page: CC3. Targets and Initiatives

#### CC3.1

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

Absolute target Intensity target

# CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science- based target?	Comment
Abs1	Scope 1	12.3%	100%	2014	5327942	2025	No, but we anticipate setting one in the next 2 years	This target refers to the engagement of Eni in the Global Gas Flaring Reduction initiative (GGFR): "Zero Gas Flaring @2030". The target refers to routine process flaring emissions and Eni is committed to anticipate this achievement in 2025. The target is published in Eni Sustainability Report (Eni for 2015, pag. 18).
Abs2	Scope 1	100%	22%	2014	49218890	2025	No, but we anticipate setting one in the next 2 years	This target refers to the engagement of Eni in reducing the carbon intensity of hydrocarbon production and industrial operations. Eni is committed to achieve a reduction of 11 MtCO2e of total direct GHG emissions by 2025, considering the 2014 production figure. In this case, the base year emissions were recalculated in order to take into account an increase in emissions related with the expected increase production by 2025 (+7MtCO2).

CC3.1b

Please provide details of your intensity target

IC	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science- based target?	Comment
Int	1 Scope 1	55.8%	43%	Other: Metric tonnes of CO2e per kilo barrells of operated oil equivalent production0	2014	27.5	2025	No, but we anticipate setting one in the next 2 years	Eni ten-year Action Plan on climate change to 2025 foresees a reduction target of 43% of the GHG performance index on total hydrocarbon operated production compared to 2014. The target was presented in March during the 2016-2019 Strategy Presentation and is published in Eni Sustainability Report (Eni for 2015, pag. 17). The target refers only to Upstream emissions, that in 2014 covered 55.8% of total Eni's GHG direct emissions.

## CC3.1c

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

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	9			The intensity target refers to a 43% reduction of the GHG performance index on total hydrocarbon operated production compared to 2014. If we consider our expectation related with the expected production by 2025, the gain in absolute reduction is equal to -9%. The official target refers only to scope 1 emissions, for this reason scope 2 emissions are considered flat in the period.

CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment	
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# CC3.1e

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

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	9.1%	15.27%	In 2015, GHG emissions from routine flaring were 4514535 tCO2eq, with a reduction from the base year equal to 813407 to tCO2eq.
Abs2	9.1%	21.20%	In 2015, Eni GHG direct emissions were 41562443 tCO2eq, with an absolute reduction of 456447 tCO2eq, despite an increase in operated hydrocarbon production of 7%. We can estimate the same percentage of completion of the intensity target, because the majority of the projects are related to the Upstream business.
Int1	9.1%	21.20%	In 2015, Eni Upstream GHG direct emissions accounted for 22790827 tCO2eq and operated hydrocarbon production reached 912775 kboe, with an intensity indicator (tCO2eq/kboe) reduction of 9% respect 2014. The 2015 results accounted for about 21% of the total reduction target expected for 2025 (-43%).

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

#### CC3.2

Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?

Yes

# CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment

# CC3.3

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

Yes

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

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	
To be implemented*	6	10917
Implementation commenced*	10	123758
Implemented*	61	1150470
Not to be implemented	0	

# CC3.3b

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

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Energy efficiency projects implemented in upstream activities	58100	Scope 1 Scope 2 (location- based)	Voluntary	6294167	6000000	<1 year	11-15 years	22 projects, involving the saving of 55200 tCO2/y of direct emissions and 2900 tCO2/y of indirect emissions. The investment was

# CC3.3a

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
									estimated since some projects were part of larger projects. Annual monetary savings were estimated assuming 325 €/toe for fuels and 100 €/MWh for electricity.
Transportation: use	Improvements in upstream logistics	129100	Scope 3	Voluntary	13985833	0	<1 year	11-15 years	27 initiatives in 16 countries, allowing to save 129100 tCO2/y of direct emissions. The projects refer to operational optimization and investment were negligible. Annual monetary savings were estimated assuming 325 €/toe for fuels and 100 €/MWh for electricity.
Energy efficiency: Processes	Energy efficiency projects implemented in refining activities	74220	Scope 1	Voluntary	8040500	4505000	<1 year	11-15 years	7 projects; 3 of them had a very short payback period (a few months); the maximum payback period was lower than 5 years. Annual monetary savings were estimated assuming 325 €/toe for fuels and 100 €/MWh for electricity.
Energy efficiency: Processes	Energy efficiency projects implemented in petrochemical activities	28850	Scope 2 (location- based)	Voluntary	5379005	6091400	1-3 years	11-15 years	3 projects avoiding the purchase of 43800 MWh per year of electricity and of 31084 MWh per year of steam. Annual monetary

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
									savings were estimated assuming 325 €/toe for fuels and 100 €/MWh for electricity.
Fugitive emissions reductions	Implementation of monitoring campaigns in 8 major gas facilities worldwide.	638500	Scope 1	Voluntary					Evaluations on the economical return of the project are still ongoing.
Other	Prosecution of flaring down projects.	221800	Scope 1	Voluntary					Evaluations on the economical return of the project are still ongoing since they depend on the reservoir response in terms of incremental production.

# CC3.3c

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

Method	Comment
Internal price of carbon	Eni considers carbon price as a fundamental factor for assessing its investments in order to include the carbon cost at the very beginning of the investment decision process.

Method	Comment
Dedicated budget for other emissions reduction activities	Eni foresees an investment of 400 M€ over the period 2016-2019 to reduce the volume of hydrocarbons sent to flaring.

#### CC3.3d

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

## Further Information

# Page: CC4. Communication

#### CC4.1

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

Publication	Status	Page/Sectio n reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complet e	Integrated Annual Report 2015: pag. 5, 10, 12-13, 15, 30, 32, 49, 54-55, 75, 78, 80, 85- 87, 88, 95-	https://www.cdp.net/sites/2016/34/5634/Climate Change 2016/Shared Documents/Attachments/CC4.1/Integrated-Annual- Report-2015.pdf	

Publication Status		Page/Sectio n reference	Attach the document	Comment
		97.		
In voluntary communication s	Complet e	Sustainability Report 2015: Pag. 2-3, 7- 12, 14-19 (Climate Change section)	https://www.cdp.net/sites/2016/34/5634/Climate Change 2016/Shared Documents/Attachments/CC4.1/eni_for_2015_report_engpdf	
In voluntary communication s	Complet e	Eni website		Eni Climate and Energy strategy is described in detail in our website: https://www.eni.com/en_IT/sustainability/climat e-change-and-new-forms-of-energy.page
In voluntary communication s	Complet e	Sustainability Performance 2015: Pag. 25-27	https://www.cdp.net/sites/2016/34/5634/Climate Change 2016/Shared Documents/Attachments/CC4.1/eni_for_2015_performance_engp df	

#### Further Information

**Module: Risks and Opportunities** 

# Page: CC5. Climate Change Risks

# CC5.1

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

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

# CC5.1a

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Carbon taxes	In 2015, more than half of Eni's direct GHG emission were under carbon pricing regulatory schemes (essentially: EU- ETS). Following the debate on carbon pricing, it's possible that in the following years further countries could progressively apply a carbon price related to GHG Scope 1 emissions and this may imply an increase in operational cost of Oil & Gas operations.	Increased operational cost	3 to 6 years	Direct	About as likely as not	Medium	With respect to Eni's GHG scope 1 emissions that currently are not covered by existing carbon pricing schemes, considering a high screening value of 40 \$/tCO2 (36 €/tCO2) the increase in costs would be equal to about 800 M€/year.	Various inter- related measures have been adopted in Eni to reduce direct emissions, including specific projects to reduce gas flaring, programmes to increase energy efficiency and projects to reduce fugitive methane emissions. Gas flaring involves burning gas associated with oil that cannot be used owing to an absence of transports or utility infrastructures. Since 2003, Eni has been part of the Global Gas Flaring Reduction (GGFR) initiative, coordinated by the	Compared with 2007, Eni has reduced the total volume of flared gas by 75%. Major initiatives are located in Nigeria and the Congo. The overall amount invested in flaring down since 2007 exceeds 2 B\$ (1.8 B€).

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								World Bank, and is committed to the goal of zero routine flaring by 2025. Regarding fugitive methane emissions, Eni is engaged in the voluntary international initiative Climate and Clean Air Coalition Oil and Gas Methane Partnership (CCAC- OGMP), committing to present a methane emissions reduction plan and to report the achieved results.	
Cap and trade schemes	The European Commission is currently working to review the European Emission Trading Scheme post 2020. As a consequence, the ETS revision will increase the price of European Union Allowances (EUA) compared with the EU	Increased operational cost	>6 years	Direct	Very likely	Medium- high	With a 2030 perspective, the approval of the current EU proposals could cause for Eni an increase of overall compliance costs up to 1.3 B€ due to EUA's price increase.	In March 2015, Eni took part at the EU public consultation about the Revision of the EU-ETS Directive. In addition, Eni is currently undertaking ad hoc studies along with other energy companies to improve the ETS efficacy.	In 2015, focusing just on the activities of the EU-ETS Working Group cost assessment, the sum of employee costs amounts more than 100 k€. Costs related to monitoring of regulation developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Reference Scenario in the period up to 2030, with a related increased compliance cost for Eni, that currently needs to buy every year more than 10 million EUAs (European Emission Allowances) for compliance porpouse.								are not included because they are allocated into routine activities.
International agreements	In particular following COP21, a fraction of institutional investors tend to consider that climate change, and more specifically, governmental responses around the world, will have implications in energy future investments. According to them, the impacts of policy driven changes are most	Reduced stock price (market valuation)	>6 years	Direct	About as likely as not	Medium- high	The financial implication associated with this risk are negligible for Eni. Indeed, thanks to Eni exposure to conventional low cost projects, our distinguished exploration success, our dynamic portfolio management, our phased approach to project development, our prudent oil price assumptions and,	As soon as the current Board of Directors was appointed in May 2014, a notable change was the introduction of the Sustainability and Scenarios Committee that replaced the previous Oil-Gas Energy Committee. This represents a strong innovation for the industry, by taking an integrated approach to sustainability	Regarding this specific risk driver, the cost of management is part of the overall business model definition and is not quantifiable.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	likely to be felt by coal and oil & gas companies. Consequently, a debate on carbon stranded asset risk has risen among certain investors. According to some observers, the peak of stranded asset risk is associated to oil & gas projects at higher break-even price and CO2 content.						last but not least, our sensitivity analysis to a level of carbon pricing (real term) which is eight-fold higher than the current EU market price (\$40tonCO2 vs. \$5.7 ton/CO2 avg. on May 2016), we deem our future projects and reserves base to be resilient to the conditions of low prices and declining demand described in the IEA 450 low carbon scenario.	ensuring the full consideration of scenario, strategy and sustainability, with a particular focus on the current climate change debate and potential changes to the company business model. Eni has established an integrated strategy to actively contribute to the energy transition based on three fundamental pillars: 1. to produce low carbon impact hydrocarbons 2. to maximise the use of gas as a fuel of choice in a scenario of decarbonisation 3. to promote the development of renewable energies, supporting their spread in the countries where we operate, and stimulating technological research.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Moreover, regarding future oil price scenario, Eni's assumption in the long term is in the lower range of industry estimates (65 \$/bbl real term from 2019) and well below the assumptions of IEA New Policy and 450 scenarios. This price is used to assess project economics, before sanctioning. In addition to that, we apply also an internal carbon pricing sensitivity of \$40/ton for CO2 for all our major projects.	

CC5.1b

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) temperature	Change in mean temperature could significantly affect future energy demand for heating purposes. According to IPCC (AR5 WG II) in Europe, which represent the major market for Eni residential retail gas sales, the net effect of global warming would be a reduction of energy demand.	Reduced demand for goods/services	>6 years	Direct	Likely	Low	According to the IPCC fifth Assessment Report (WGII), Europe heating degree days are expected to decrease by 11-20% between 2000 and 2050 due solely to climate change. The latter net reduction of energy demand could affect residential gas sales in Italy and Europe but, according to our estimates, this phenomenon will be negligible in terms of financial implications (<1% of 2015 net sales from operations, equal to 0.7 B€).	Eni has developed a proprietary methodology to improve the accuracy of temperature forecasting. Kassandra Meteo Forecast "e-kmf™" system has been validated and is going to be used in Eni Midstream business for long-term temperature forecast on main Eni's EU markets different regions of Europe (Italy, Belgium, Germany and France), for short-term forecast on more than 80 European cities for improving the dual energy (gas and electricity) forecast	The R&D investment for Kassandra Meteo Forecast "e- kmf™" system has been about 2.1 M€ in the period 2009- 2014 and the operational costs amount to 150 k€/year.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								demand and for balancing the gas transportation grid in Italy. Furthermore, the short-term forecast with hourly resolution of temperature, pressure and humidity is currently used in enipower for optimizing the process of power generation in 6 Combined Cycle Gas Turbine (CCGT) plants in Italy with an overall power capacity of 5 GW	
Change in precipitation extremes and droughts	Changes in precipitation extremes and droughts can generate important risks and produce serious damages at operations activities. This risk	Reduction/disruption in production capacity	Up to 1 year	Direct	More likely than not	Medium- high	Eni's is performing in- depth analysis to estimate the financial implications of this risk driver. However, matching Eni's	The assessment of risks related to natural hazards and climate change impacts relies on a dedicated Integrated Risk	Eni total expenditures in 2014 related to water resources management were 82 M€. The costs for

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	may impact in terms of supply and transport interruptions, cost of maintenance, insurance and investment in infrastructures. The effect of droughts is often determined by external socio- economic factors and not only by physical shortage of water quantity. Drought contributes to increase the vulnerability of the territory and biodiversity loss and forests have important functions impeding desertification, and adjusting the water flow. Moreover, increased competition for water supplies among sectors and communities would lead to higher costs and reduced availability of water. Water scarcity (water stress) may also limit licence to						2015 public production figures with major climate risk country indexes could provide some estimates. Indeed, according to "ND-Gain" index, during 2015 Eni's produced hydrocarbons in seven low ranked countries, located in different continents. Regarding these low ranked countries, If we estimate a one month interruption of the half of the most relevant country production, the related financial impact would be less than 100 M€.	Assessment process. Databases such as "Maplecroft" risk analysis maps, as well as "Global Water Tool" and "Aqueduct" has been used in Eni for many years. Water management plans in top consumer sites and target for reduction and recycle are committed. Climate related risks refer not only to the evolution of the energy sector but also to the physical impacts of climate change. With a long term perspective, we have therefore started a project with the Euro- Mediterranean	the study with CMCC is more than 100 k€.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	operate and increase operational costs. As a global actor, with a relevant presence in Africa and other sensitive areas, Eni could be affected by these risk drivers.							Centre for Climate Change that foresees the assessment of future climate scenarios and will enable Eni to set up an adaptation framework in our major countries.	
Tropical cyclones (hurricanes and typhoons)	Several thousand offshore drilling platforms and thousand of miles of pipeline are vulnerable to disruption and damage from tropical storms. Tropical cyclones such as hurricanes or typhoons cause damages to installations and may imply reduction/disruption of our production activities and the interruption of our supply chain, or hamper normal operations. Eni has identified	Reduction/disruption in production capacity	Up to 1 year	Direct	Very likely	Medium- high	Eni's is currently performing in- depth analysis to estimate the financial implications of this risk driver. However the residual risk is managed by insurance coverage (up to 1 B€ for offshore events and 1.36 M€ for onshore plants) that includes physical damage to assets, third	In order to manage extreme weather events risks, Eni developed dedicated risk assessment procedures such as the Exposure to Risk EtR methodology, that takes into consideration the economic value of the asset, its impact on production, the risk linked to its technological complexity and	The greatest part of these costs are related to insurance fees which are included in complex contracts that cover different items. Therefore it is not easy to determine the amounts of these additional costs. The costs related with climate scenarios studies

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	operations and facilities in regions exposed to hurricanes and tornados and the most susceptible assets are the offshore installations in the Gulf of Mexico.						party liability, workers' compensation, pollution and other damage to the environment. As an indicative information, Eni holds interests in 188 exploration and production blocks in deep and conventional offshore of the Gulf of Mexico of which 122 are operated by Eni. In 2015 Eni's production in the Gulf of Mexico was about 67 kboe/d. If we estimate a one month interruption of the half of Eni's Gulf of Mexico production, the related	the geographical location. In addition, Eni's approach to reduce these risks is to design facilities in accordance with RP2A guidance (API Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms). Climate related risks refer not only to the evolution of the energy sector but also to the physical impacts of climate change. With a long term perspective, we have therefore started a project with the Euro- Mediterranean Centre for Climate	amount to 100 k€.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							financial impact would be less than 50 M€.	Change that foresees the assessment of future climate scenarios and will enable Eni to set up an adaptation framework in our major countries.	
Sea level rise	Rising sea levels are likely to lead to equipment damage from flooding or erosion and increase transportation costs. A significant portion of Eni's energy infrastructure is located near the coasts. Eni's chemical and refining plants in Porto Marghera (Venice, Italy) could be at a low risk for sea level rise and extreme tides fluctuations.	Reduction/disruption in production capacity	>6 years	Direct	Likely	Low- medium	Eni's is currently performing in- depth analysis to estimate the financial implications of these risk drivers. Regarding sea level rise, we have taken into account the risk related to the loss of recent investments for the revamping of the chemical plant and the conversion of a traditional refinery into a bio-refinery in	Regarding offshore structure design criteria, it is important that oil platform decks are designed to be built high enough above the water's surface to avoid waves washing over the top and overload the platform. In order to manage the risk of sea level rise, Eni has set up an Emergency response plan and a	Management costs related to sea level rise are not relevant for Eni. In particular Eni has no equity in the Mose project.
Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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							Venice (300 M€).	dedicated databases. Regarding the chemical plant in Porto Marghera plant (Venice), the Mose public infrastructure for protecting the Venice Lagoon from extreme tides fluctuations and sea level rise. The Mose's rows of mobile gates enable to temporarily separate the lagoon from the sea in the event of a high tide.	

CC5.1c

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	After COP21 stakeholders have increased demand for the reduction of carbon footprint in processes and products. This is specifically true for the Oil&Gas business sector. Indeed, Eni's stakeholder main concerns are related to GHG emission reduction with a particular focus on gas flaring, energy efficiency improvement and in general limiting activities with potential impact on the effects of climate change, for example promoting a responsible use of water resources.	Reduced demand for goods/services	3 to 6 years	Direct	Likely	Medium- high	financial implications related to reputational damage are hard to be estimated because clients may react differently according to their awareness of the risk. Anyways, if we consider 2015 Eni net sales from operations (68 B€), an reduction related to this risk could amount to 1% (eg 0.7B€).	Eni's awareness on the risks posed by climate change have induced the company to set a robust and comprehensive strategy since early 2000. This strategy - based essentially on the focus on conventional assets with low breakeven, the reduction of emissions through flaring down and energy efficiency projects as well as the greening of downstream businesses - has already produced remarkable results in terms of the resilience of our portfolio and long term value sustainability. We were the first to convert a traditional refinery into a bio- refinery, in Venice, for the production of environmentally friendly biofuels. We will also pursue the transformation	The total amount invested in flaring down since 2007 exceeds 2 billion dollars. Eni is also investing in R&D to overcome the current limitations of renewable sources. In Solar Projects for example about 25 M€ have been spent in 5 years. Other important green initiative implemented are the Green Chemistry 380 M€ and the Venice Biorefinery 100 M€.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								of the Gela Refinery in Sicily into a green refinery. We have also launched a series of green chemistry projects at Porto Torres (Sardinia) and Porto Marghera (Venice). In addition, in 2015 Eni engaged also in methane fugitive reduction and commercial renewables development. This carbon strategy is well supported by the Integrated Risk Management system which considers climate risk measuring the related impact on different clusters, among other reputation. Eni's leadership in climate disclosure has been recognised by inviting the company to join, as O&G representative, the Task Force on Climate related	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Financial Disclosure of the Financial Stability Board	

### CC5.1d

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

#### CC5.1e

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

#### CC5.1f

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

#### Further Information

### Page: CC6. Climate Change Opportunities

#### CC6.1

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

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

### CC6.1a

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
International agreements	The Paris Agreement can promote a solid institutional framework for the development of REDD+ projects (Reducing Emission from Deforestation and forest Degradation) and the use of relative credits	New products/business services	3 to 6 years	Direct	Likely	Medium- high	REDD+ projects could generate profits in terms of emission credits in voluntary market and benefits for human development and biodiversity with a great	Eni has performed a study to evaluate the potential of REDD+ projects in some developing countries. The study has been performed in collaboration with CMCC	Total expenditure to date related to employee costs and the studies performed by CMCC amounts to more than 100 k€.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	for compliance purposes. These initiatives, regularly recognized by UNFCCC could deliver environmental and social benefits for local communities as well as carbon credits revenues. REDD+ projects will represent an opportunity for Eni, due to their sustainability and reputational returns and Eni is evaluating the potential of these projects in specific countries.						international positive feedback. Considering a credit value of 5 €/tCO2 and a medium size project delivering 100,000 credits/year could generate a yearly revenue of about 500 k€.	(Euro- Mediterranean Centre for Climate Change). Currently Eni is studying the development of REDD+ projects.	
Cap and trade schemes	Currently EU- ETS allows until 2020 the use of international credits such as Clean Development Mechanism (CDM) and Joint	Reduced operational costs	>6 years	Direct	Likely	Medium	An average compliance cost reduction for Eni related to the use of international credits amounts to some 10	To manage this trading opportunity, since 2013 Eni has centralized his trading activities related to CO2 into his own	An estimate of total employee costs related to CO2 trading activities is 250 k€/year.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Implementation (JI) to abate part of the compliance cost for companies which are participating in the scheme. However, in the perspective of an international post-2020 agreement, it's possible that the use these credits will be allowed also for post-2020 compliance. Every year Eni buys international credits in the market for EU- ETS compliance purpose, reducing in this way the operational cost of allowances purchase, thanks to the price difference between EUA and offset credits.						M€/y. A similar value could be taken into account for future opportunities related to CDM, JI and other new kinds of credits.	subsidiary Eni Trading & Shipping. The company, based in London, is in charge for the optimization of trading activities and the balancement of quotas for whole Eni.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in temperature extremes	The increase of extreme temperatures could affect sales of gas and open up new market opportunities. The natural gas storage and reserves optimization towards the demand reduces the risk of energy price increases. By knowing the temperature trend of a certain geographical area and paying attention to anomalous trends, it is possible to improve the planning of storage reserves, sale and supply of energy resources delivering competitiveness benefits. A	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	Low- medium	The possibility of using meteorological trends (i.e. temperature, pressure, humidity) in advance is very useful to obtain competitive prices on the electric market with better planning and management of stock, sales and supplies of energy sources. In addition, it can reduce the unbalancing fees linked to the gas market in Italy. In 2015 the related cost saving have been estimated in more than 1 Million €.	Eni developed with the collaboration of Centro Epson Meteo the Kassandra Meteo forecast (ekmf <sup>™</sup> ), a proprietary system for forecasting temperatures from meteorological and climate data in the short/long- term (from 1 to 90 days) over large European areas (including Italy, Belgium, Germany and France). The system aplies to power generation activity at EniPower plants and on the largest Italian cities and can give a	The R&D investment for Kassandra Meteo Forecast (e- kmfTM) system has been about 2.1 Million $\in$ in the period 2009-2014 and the operational costs are amount to 150 k $\in$ for year.

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

## CC6.1b

Opportunity Descriptio driver	n Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
reliable short-t weather foreca can optimize processes in cogeneration H and power (Cl plants and contribute to reduce costs concerning imbalance charges on po national grid a improve the management of natural gas portfolio in Europe. Eni is involved in the gas&power rei market and, thanks to its subsidiary Enipower, Eni major player in the Italian utiliti	ast heat HP) ower ind of tail						competitive advantage respect other market players.	

# CC6.1c

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Reputation is a key value for Eni's credibility and consumers/investors' attraction. In these years all stakeholders (investors, consumers, institutions etc.) have been requiring an increasing engagement in low carbon investments and commitment to tackle climate change. As an oil & gas company, rather than considering these issues only as a risk, in the last years Eni took the leadership in fighting climate change with a direct engagement of the CEO and by investing more in low carbon technologies, including renewables.	Increased demand for existing products/services	1 to 3 years	Direct	Likely	Medium- high	It is not easy to estimate reputational financial implication. Indeed, stakeholders interest in climate change issue has been progressively increasing due to the COP 21 achievements. Anyways, as a prudential estimate, we can consider an Eni total sales increase up to 1%. Considering 2015 Eni net sales from operations (68 B€), this could amount to 0.7 B€.	In the latest year Eni has been increasingly investing to renew its traditional businesses, toward a low carbon conversion of products and processes. Since 2014 Eni is also taking the leadership in tackling climate change through the participation in high-level voluntary initiatives such as the Oil and Gas Climate Initiative (OGCI) and the Clean Air and Climate Coalition (CCAC). With respect to low carbon products, Eni has been	The project for the construction in Porto Torres of one of the largest industrial complexes in the world for the production of chemical products from renewable sources, has an investment of around 500 M€. In addition, investments for the integrating Venice pole (green refinery and chemistry) amount to 300 M€. Regarding Enjoy, the cost of investment for a medium Italian town is between 10 and 20 M€.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								investing in green innovation to maintain and renew its production in Italy: - the integrated biorefinery projects and the production of biochemicals, chemicals for lubricants and green diesel for use in the biorefinery are examples of this trend; - the development of an innovative car sharing initiative ("Enjoy") in the largest Italian cities; - the renewal of strategic partnership on breakthrough renewables R&D with MIT and Polytechnic of	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Milan. In 2015 Eni has established the new Energy Solutions Department, with the mission to complement and integrate the traditional energy sources with the production of energy from renewable sources, through profitable projects on an industrial scale.	

### CC6.1d

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

#### CC6.1e

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

CC6.1f

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

#### **Further Information**

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

### Page: CC7. Emissions Methodology

CC7.1

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

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Mon 01 Jan 2007 - Mon 31 Dec 2007	64919061

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 2 (location-based)	Mon 01 Jan 2007 - Mon 31 Dec 2007	4230190
Scope 2 (market-based)		

## CC7.2

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

Please select the published methodologies that you use
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Climate Leaders: Direct Emissions from Stationary Combustion
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009
European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations
IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011
ISO 14064-1
US EPA Climate Leaders: Direct Emissions from Mobile Combustion Sources
Other

## CC7.2a

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

- Gas Research Institute and US Environmental Protection Agency (GRI), software and reports;

- 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;

- IEA, CO2 Emissions from Fuel Combustion, Highlights (2014 Edition)

- Specific internal procedures developed by Eni's business units that are not well represented in the recognized standards

#### CC7.3

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

Gas	Reference		
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)		
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)		
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)		

## CC7.4

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

Fuel/Material/Energy	Fuel/Material/Energy Emission Factor		Reference
Natural gas	0.00196	metric tonnes CO2 per m3	CO2: Natural Gas - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2015)

Fuel/Material/Energy	<b>Emission Factor</b>	Unit	Reference
	0.440	metric tonnes CO2 per metric	CO2: Fuel Oil - EU-ETS Reg. 601/2012 (revised by Italian
Distillate fuel oil No 1	3.142	tonne	Environmental Ministry for 2015)
Diesel/Gas oil	3.155	metric tonnes CO2 per metric tonne	CO2: Diesel - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2015)
Electricity	0.416	metric tonnes CO2 per MWh	CO2: IEA CO2 Scope 2 emissions per MWh from electricity and heat generation, Italy - IEA 2014
Liquefied petroleum gas (LPG)	3.024	metric tonnes CO2 per metric tonne	CO2: LPG - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2015)
Refinery gas	2.678	metric tonnes CO2 per metric tonne	CO2: Refinery fuel gas - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2015)
Natural gas	2E-05	metric tonnes CO2e per GJ	CH4 - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Residual fuel oil	6E-05	metric tonnes CO2e per GJ	CH4 - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Diesel/Gas oil	6E-05	metric tonnes CO2e per GJ	CH4 - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Electricity	0.00044	metric tonnes CO2e per MWh	CH4 - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Liquefied petroleum gas (LPG)	2E-05	metric tonnes CO2e per GJ	CH4 - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Refinery gas	2E-05	metric tonnes CO2e per GJ	CH4 - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Natural gas	3E-05	metric tonnes CO2e per GJ	N2O - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Residual fuel oil	0.00019	metric tonnes CO2e per GJ	N2O - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Diesel/Gas oil	0.00019	metric tonnes CO2e per GJ	N2O - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Electricity	0.02502	metric tonnes CO2e per MWh	N2O - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Liquefied petroleum gas (LPG)	3E-05	metric tonnes CO2e per GJ	N2O - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Refinery gas	3E-05	metric tonnes CO2e per GJ	N2O - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas
Other: Associated Gas	0.00348	metric tonnes CO2 per m3	CO2: Gas derived from oil - EU-ETS Reg. 601/2012 (revised by Italian

Fuel/Material/Energy	Fuel/Material/Energy Emission Factor		Reference		
			Environmental Ministry for 2015)		
Other: Flared Gas	61.151	metric tonnes CO2 per GJ	CO2: Flared gas (butane) - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2015)		

#### **Further Information**

Eni operates in many activity sectors: exploration and production, refining and marketing, 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 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 specific EFs are taken from literature referring to the above mentioned Eni's GHG Protocols.

## Page: CC8. Emissions Data - (1 Jan 2015 - 31 Dec 2015)

#### CC8.1

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

**Operational control** 

#### CC8.2

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

41562443

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

Yes

### CC8.3a

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

Scope 2, location- based	Scope 2, market-based (if applicable)	Comment
609250		According to internal procedures, Eni reports Scope 2 GHG emissions using the location-based approach. We are investigating the potential application also of the new market-based approach for next year.

## CC8.4

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

No

#### CC8.4a

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

	Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
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Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Data Gaps Assumptions Sampling Data Management Other: Published Emission Factors	Eni has developed an internal procedure to define the global uncertainty of the GHG inventory, based on international references (IPCC, 2000. Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories). Uncertainty for EU-ETS CO2 emission data for sites with GHG emission > 500,000 t CO2/y is less than 2%. Since 2005, each Divisions/BU is equipped with a strong accounting and reporting tool in compliance with the certification requirements. Eni installations under EU ETS regulation have adopted internal procedures in order to respond to/compliance with the allowed uncertainly 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. 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. For other emission data not falling into EU ETS, 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

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data	
			following: - missing or incomplete information regarding the emission sources inventory; - measurement methods; - data acquisition and transmission; - data processing.	
Scope 2 (location- based)	More than 5% but less than or equal to 10%	Data Gaps Assumptions Extrapolation Other: Published Emission Factors	Eni has developed an internal procedure to define the global uncertainty of the GHG inventory, based on international references (IPCC, 2000. Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories). 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 and "CO2 Emissions from Fuel Combustion Highlights,2014 Edition"). The missing or incomplete data regarding the worldwide purchased energy data gathering are other sources of uncertainty	
Scope 2 (market- based)				

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

Third party verification or assurance process in place

### CC8.6a

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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/34/5634/Climate Change 2016/Shared Documents/Attachments/CC8.6a/Eni GHG 2015 Verification Statement Scope 123.pdf	Page 1	ISO14064- 3	100

#### CC8.6b

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

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

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

### CC8.7a

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

Location- based or market- based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location- based	Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/34/5634/Climate Change 2016/Shared Documents/Attachments/CC8.7a/Eni GHG 2015 Verification Statement Scope 123.pdf	Page 1	ISO14064- 3	100

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

Additional data points verified	Comment
Year on year change in emissions (Scope 1 and 2)	Year on year change in emissions (scope 1 and 2) has been verified under the third party certification process of Eni's GHG Inventory 2015. Eni's GHG inventory report provides a comparison between the emissions of 2015, 2014 and 2013. Data have been assumed essentially correct, as reported in the Verification Statement attached in questions 8.6a and 8.7a
Year on year change in emissions (Scope 3)	Year on year change in emissions (scope 3) has been verified under the third party certification process of Eni's GHG Inventory 2015. Eni's GHG inventory report provides a comparison between the emissions of 2015, 2014 and 2013. Data have been assumed essentially correct, as reported in the Verification Statement attached in questions 14.2a
Year on year emissions intensity figure	Year on year emissions intensity figures have been verified under the third party certification process of Eni's GHG Inventory 2015. Eni's GHG inventory report in fact include some key indicators (the same reported also in section 12 of the CDP questionnaire) for each sector of activity measured for the year 2015 and their variations compared to 2014 and 2013. Data have been assumed essentially correct, as reported in the Verification Statement attached in questions 8.6a and 8.7a
Change in Scope 3 emissions against a base year (not target related)	Change in Scope 3 emissions has been verified under the third party certification process of Eni's GHG Inventory 2015. Eni's GHG inventory report provides a comparison between the emissions of 2014 and 2013, with an explanation regarding the reasons of variations. Data have been assumed essentially correct, as reported in the Verification Statement attached in questions 14.2a

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

No

CC8.9a

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

### **Further Information**

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

## CC9.1

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

Yes

### CC9.1a

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

Country/Region Scope 1 metric tonnes CO2e

Country/Region	Scope 1 metric tonnes CO2e
Italy	19317688
Europe	1645854
Africa	16168353
Americas	657704
Asia, Australasia	3670837
Rest of world	102006

### CC9.2

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

By business division By facility By GHG type By activity

## CC9.2a

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

Business division	Scope 1 emissions (metric tonnes CO2e)
Exploration & Production	22790827
Gas & Power	10570012
Refining & Marketing	5137870

Business division	Scope 1 emissions (metric tonnes CO2e)		
Petrochemical	3049115		
Corporate and financial companies	10467		
Others	4152		

## CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Enipower Bolgiano power plant	95572		
Enipower Brindisi power plant	2091167		
Enipower Ferrera Erbognone power plant	2632021		
Enipower Livorno power plant	554648		
Enipower Ravenna power plant	1692476		
Enipower Ferrara power plant	1269591		
Enipower Mantova power plant	1690474		
Livorno Refinery	469803		
Sannazzaro Refinery	2836256		
Taranto Refinery	945670		
Taranto Refinery power plant	314766		
Venezia Refinery	359394		
Gela Refinery	206724		
Versalis Brindisi plant	432532		
Versalis Ferrara plant	19210		
Versalis Mantova plant	189835		
Versalis Porto Marghera plant	705375		
Versalis Porto Torres plant	76331		

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Versalis Priolo plant	821789		
Versalis Ragusa plant	12906		
Versalis Ravenna plant	38759		
Versalis Dunquerke plant	643720		
Versalis Grangemouth plant	44012		
e&p Barbara T1 platform	49095		
e&p Barbara T2 platform	68871		
e&p Cervia K platform	31693		
e&p Garibaldi K platform	24790		
e&p Firenze FPSO plant	98532		
e&p Casal Borsetti plant	33157		
e&p Fano plant	79535		
e&p Trecate plant	26195		
e&p Val d'Agri plant	546426		
e&p Crotone plant	52130		
e&p Gela Enimed plant	18290		
e&p Pineto plant	18837		
e&p Torrente Tona plant	101713		
e&p Hewett plant	53439		
e&p Goliat plant	54198		
RSI Sistema Rete Torce	1215		
LBOC - Point of Ayr Terminal	67330		
LBOC - Douglas	201935		
LBOC - Oil Storage Installation	4864		

# CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	37881917
CH4	3481670
N2O	198867

#### CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Combustion & Process	31718998
Flaring	5506615
Venting	1796691
CH4 from Combustion, process and fugitives	2540149

#### **Further Information**

Ref. CC9.2b – The breakdown reported refers only to Eni's Installation included in EU Emission Trading System and it doesn't cover 100% of Scope 1 emissions. According to Eni GHG accounting and reporting system, Eni accounts 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 almost 66 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). Ref. CC9.2c: the sum of GHG emissions by GHG type may differ from the total figure reported in CC8.2 due to small approximations of our reporting database system (the difference is however negligible) Ref. CC9.2d: the sum of GHG emissions by activity may differ from the total figure reported in CC8.2 due to small approximations of our reporting database system (the difference is however negligible)

### Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

## CC10.1

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

#### Yes

## CC10.1a

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

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Italy	395142		1117883	0
Europe	141744		633127	0
Africa	71883		269000	0
Americas	205		1000	0
Asia, Australasia	73		500	0

## CC10.2

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

By business division

CC10.2a

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

Business division	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Exploration & Production	93758	
Gas & Power	13163	
Refining & Marketing	111592	
Petrochemical	337206	
Corporate and financial companies	13344	
Other activities	40187	

## CC10.2b

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

Facility	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
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CC10.2c

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

Activity	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
----------	---	---

#### **Further Information**

According to Eni GHG accounting and reporting system, Eni accounts 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 more than 66 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)

## Page: CC11. Energy

#### CC11.1

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

More than 5% but less than or equal to 10%

## CC11.2

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

Energy type	Energy purchased and consumed (MWh)
Heat	1555
Steam	583010
Cooling	0

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

#### 141968802

# CC11.3a

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

Fuels	MWh
Natural gas	110515500
Refinery gas	24602942
Liquefied petroleum gas (LPG)	188453
Motor gasoline	77116
Diesel/Gas oil	3724360
Distillate fuel oil No 4	767570
Petroleum coke	263419
Other: Mostly fuel oil from catalytic cracking	1829442

## CC11.4

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

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
Energy attribute certificates, Guarantees of Origin	0	Since 1st April 2015 Eni has purchased 1174279 Guarantees of Origin, by 31st March 2016 all of these

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
		were annulled for Eni's customers.
Grid-connected electricity generation owned, operated or hosted by the company, where electricity attribute certificates do not exist or are not required for a usage claim	13510	The figure refers to electricity generated from photovoltaic plants owned by Enipower.

## CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

7671000 1437000 23521000 13510	

## Further Information

# Page: CC12. Emissions Performance

# CC12.1

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

Decreased

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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation			
Emissions reduction activities	2.6	Decrease	Last year 1117470 tCO2e were reduced by Eni's emissions reduction projects, and the total Scope 1 and Scope 2 emissions in the previous year was 42632666 tCO2e, therefore Eni performed a reduction of 2.6%: (1117470/ 42632666)*100= 2.6% In 2015 the GHG absolute emissions reduction amounts to 460962 tCO2eq, equal to -1.1% vs 2014 (2014 figure has been revised taking into account of the change in boundary and the recalculation with new GWP: the new figure is 42632666 tCO2eq) Various inter-related measures have been adopted to reduce emissions in the production processes including programmes to increase energy efficiency and specific projects to reduce gas flaring. Gas Flaring (-221800 tCO2eq) and Venting (-98000 tCO2eq) - After having consolidated a reduction of gas volumes sent to flaring last year of 75% compared with 2007, despite the difficult environment in Countries like Nigeria and Libya, in 2015 Eni accomplished a further reduction of 7% of volumes of hydrocarbons sent to process flaring compared with 2014. Eni foresees an investment of 400 million euros over the next 4 years to reduce the volume of hydrocarbons sent to flaring. Energy Efficiency (-161170 tCO2eq) - The energy efficiency programs implemented since 2008 have resulted in operational savings of approximately 370 thousand tons of petroleum equivalent a year, of which more than 20% from optimized logistics in the upstream, equal to an accumulated reduction of over 1 Mt CO2 eq/year. Further engineering modifications in the power sector were added to these interventions, thanks to which a reduction in energy intensity over the next four years is predicted for plants that already operate with high efficiency, like combined cycle gas turbine plants. Fugitive Emissions (-638000 tCO2eq) - The reduction of fugitive emissions represents a new challenge for the O&G companies. Eni has already reduced in 8 subsidiaries the emissions of more than 0.6 Mt of CO2 eq estimated in 2015 vs. emissions reported in 2014 (estimated mainly with literature emission fac			
Divestment	0	No change	The 2014 figure has been revised taking into account of the change in boundary related to the sales of major stakes of Saipem (the former Eni Engineering & Construction subsidiary, which accounted for about 1.2 million tCO2eq). The new figure is 42632666 tCO2eq. Hovewer, no changes are considered because year to year comparisons have been done considering the updated value.			
Acquisitions						
Mergers						
Change in output	1.5	Increase	Despite absolute GHG Emission in 2015 has fallen overall by 1.1% respect to 2014, the oil&gas operated production has increased by 7%, causing a relative increase in GHG emissions.			
Change in methodology	0	No change	The 2014 figure has been revised taking into account of the change in methodology related to the use of GWPs from IPCC AR4 instead of IPCC AR2. The new figure is 42632666 tCO2eq. Hovewer, no changes are			

## CC12.1a

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
			considered because year to year comparisons have been done considering the updated value.
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

#### CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

## CC12.2

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

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.000612	metric tonnes CO2e	68945000000	Location- based	35.2	Increase	As financial emissions intensity, we use the GHG Scope 1 and Scope 2 emissions per EUR of company revenues (net sales from operations and other income and revenues). Eni's total revenues for 2015 were 68945 million $\in$ (ref. Eni Fact Book 2015, page 61). This performance indicator has substantially increased in 2015 respect to 2014, due to the decrease of revenues associated with the low price of barrel. Note that KPI for 2014 has been revised according to the new boundary, and the updated value is 0.000452.

# CC12.3

# Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.02497	metric tonnes CO2e	barrel of oil equivalent (BOE)	912775228	Location- based	9.1	Decrease	Scope 1+2 - Exploration & Production Key Performance Indicator, expressed in terms of tCO2 equivalent (23539574) per BOE (barrel of oil & gas gross operated production). Figure includes CO2, CH4 and N2O emissions. The reduction respect to 2014 reflects the big effort of Eni for the implementation of specific strategies to reduce greenhouse gas emissions

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
							(in particular flaring down activities) and improvement actions designed to increase energy efficiency. The details of the reduction initiatives are described in question CC12.1a Note that KPI for 2014 has been revised according to the new GWPs used, and the updated value is 0.02747

## Further Information

# Page: CC13. Emissions Trading

## CC13.1

Do you participate in any emissions trading schemes?

#### Yes

## CC13.1a

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

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union	Thu 01 Jan 2015 - Thu 31 Dec	10871517	8761983	19633500	Facilities we own and
Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
-------------	-----------------------------------	----------------------	----------------------	--	----------------------
ETS	2015				operate

### CC13.1b

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

In order to manage the compliance obligation under the EU Emissions Trading Scheme, Eni has centralized the activity within Eni Trading & Shipping, a wholly owned subsidiary based in London.

Eni Trading & Shipping is the wholesale market interface in the emissions market for all business units and subsidiaries of Eni. Through its dedicated trading desk, Eni Trading & Shipping manages the price exposure and co-ordinates the compliance activity of the business units.

The central Health, Safety, Environment and Quality (HSEQ) department of Eni is responsible for aggregating the verified emissions data and providing emissions forecasts to Eni Trading and Shipping to facilitate this process.

In addition to participating in the European Emission Trading system, from time to time, Eni evaluates the potential to develop new GHG reduction projects based on the Kyoto flexible mechanisms. The aim is to export environmentally-friendly technology and obtain corresponding emissions reduction credits that may be used for its European installations.

Lastly, Eni estimates the short and mid-term carbon price within its Reference Scenario, which provides the business lines with an outlook for all the energy-related strategic variables. Specifically, the forecasts of the carbon prices are determined on a regular basis through analysis based on European Emissions Trading and Kyoto framework supply/demand fundamentals and political and regulatory developments.

### CC13.2

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

Yes

CC13.2a

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

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit purchase	Energy efficiency: industry	UA1000411	JI (Joint Implementation)	1000000	1000000	Yes	Compliance
Credit purchase	CO2 usage	UA1000456	JI (Joint Implementation)	1000000	1000000	Yes	Compliance
Credit purchase	Energy efficiency: service	UA1000468	JI (Joint Implementation)	170000	170000	Yes	Compliance
Credit purchase	Energy efficiency: supply side	UA1000474	JI (Joint Implementation)	750000	750000	Yes	Compliance
Credit purchase	Energy efficiency: industry	UA1000485	JI (Joint Implementation)	1200000	1200000	Yes	Compliance
Credit purchase	Energy distribution	UA1000499	JI (Joint Implementation)	1000000	1000000	Yes	Compliance
Credit purchase	Wind	CN589	CDM (Clean Development Mechanism)	14000	14000	Yes	Compliance
Credit purchase	Wind	CN873	CDM (Clean Development Mechanism)	27538	27538	Yes	Compliance
Credit purchase	Other:	CN1225	CDM (Clean Development Mechanism)	36265	36265	Yes	Compliance
Credit purchase	Fossil fuel switch	CN1344	CDM (Clean Development Mechanism)	65854	65854	Yes	Compliance
Credit purchase	Fossil fuel switch	CN1373	CDM (Clean Development Mechanism)	32266	32266	Yes	Compliance
Credit purchase	N20	CN1481	CDM (Clean Development Mechanism)	163234	163234	Yes	Compliance
Credit purchase	Hydro	CN1485	CDM (Clean Development Mechanism)	23992	23992	Yes	Compliance
Credit purchase	Hydro	CN1496	CDM (Clean Development Mechanism)	10015	10015	Yes	Compliance
Credit purchase	Other:	CN1657	CDM (Clean Development Mechanism)	48946	48946	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 cancelled	Purpose, e complian
Credit purchase	Hydro	CN1872	CDM (Clean Development Mechanism)	41000	41000	Yes	Compliance
Credit purchase	Coal mine/bed CH4	CN1926	CDM (Clean Development Mechanism)	13280	13280	Yes	Compliance
Credit purchase	Fossil fuel switch	CN2439	CDM (Clean Development Mechanism)	3086	3086	Yes	Compliance
Credit purchase	Wind	CN2449	CDM (Clean Development Mechanism)	13834	13834	Yes	Compliance
Credit purchase	Hydro	CN2592	CDM (Clean Development Mechanism)	10073	10073	Yes	Compliance
Credit purchase	Hydro	CN3030	CDM (Clean Development Mechanism)	100000	100000	Yes	Compliance
Credit purchase	Coal mine/bed CH4	CN3067	CDM (Clean Development Mechanism)	39313	39313	Yes	Compliance
Credit purchase	Coal mine/bed CH4	CN3130	CDM (Clean Development Mechanism)	137290	137290	Yes	Compliance
Credit purchase	Hydro	CN3158	CDM (Clean Development Mechanism)	24424	24424	Yes	Compliance
Credit purchase	Fossil fuel switch	CN3166	CDM (Clean Development Mechanism)	39391	39391	Yes	Compliance
Credit purchase	Methane avoidance	CN3361	CDM (Clean Development Mechanism)	17525	17525	Yes	Compliance
Credit purchase	Hydro	CN4597	CDM (Clean Development Mechanism)	18674	18674	Yes	Compliance
Credit purchase	Hydro	CN1510	CDM (Clean Development Mechanism)	6542	6542	Yes	Compliance
Credit purchase	Wind	CN1627	CDM (Clean Development Mechanism)	69200	69200	Yes	Compliance
Credit purchase	Hydro	CN2010	CDM (Clean Development Mechanism)	1	1	Yes	Compliance
Credit	Fossil fuel switch	CN3008	CDM (Clean Development	353337	353337	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 cancelled	Purpose, compliar
purchase			Mechanism)				
Credit purchase	Wind	CN4046	CDM (Clean Development Mechanism)	205459	205459	Yes	Compliance
Credit purchase	Wind	CN4095	CDM (Clean Development Mechanism)	169017	169017	Yes	Compliance
Credit purchase	Fossil fuel switch	CN4292	CDM (Clean Development Mechanism)	575827	575827	Yes	Compliance
Credit purchase	Hydro	CN4482	CDM (Clean Development Mechanism)	18748	18748	Yes	Compliance
Credit purchase	Wind	CN7407	CDM (Clean Development Mechanism)	185581	185581	Yes	Compliance
Credit purchase	Hydro	CN8164	CDM (Clean Development Mechanism)	284611	284611	Yes	Compliance
Credit purchase	Wind	CN8177	CDM (Clean Development Mechanism)	179677	179677	Yes	Compliance
Credit purchase	Other:	ID1144	CDM (Clean Development Mechanism)	225000	225000	Yes	Compliance
Credit purchase	Wind	CN4046	CDM (Clean Development Mechanism)	3249	3249	Yes	Compliance
Credit purchase	Wind	CN4769	CDM (Clean Development Mechanism)	246050	246050	Yes	Compliance
Credit purchase	Wind	CN5275	CDM (Clean Development Mechanism)	244874	244874	Yes	Compliance
Credit purchase	Wind	CN5284	CDM (Clean Development Mechanism)	44692	44692	Yes	Compliance
Credit purchase	Wind	CN6807	CDM (Clean Development Mechanism)	231424	231424	Yes	Compliance
Credit purchase	Coal mine/bed CH4	CN6948	CDM (Clean Development Mechanism)	39000	39000	Yes	Compliance
Credit purchase	Wind	CN8071	CDM (Clean Development Mechanism)	221894	221894	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 cancelled	Purpose, e.g. compliance
Credit purchase	Hydro	ID7096	CDM (Clean Development Mechanism)	5000	5000	Yes	Compliance
Credit purchase	Energy efficiency: own generation	IN2716	CDM (Clean Development Mechanism)	115129	115129	Yes	Compliance
Credit purchase		IN8095	CDM (Clean Development Mechanism)	48688	48688	Yes	Compliance

## Further Information

# Page: CC14. Scope 3 Emissions

# CC14.1

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods	Relevant,	383495	This figure refers only to GHG emissions	100.00%	Eni assumes this category relevant, but actually

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
and services	calculated		from drilling activities contracted to third parties. Eni consider drilling as part of "core business", so related scope 3 emissions are calculated and reported separately from supply chain. Engines emissions are calculated based on API Compendium methodologies, on fuel consumption and equipment specific combustion emission factors.		only GHG Scope 3 emissions from core outsourced/contracted activities (i.e. drilling) are calculated, because of the good level of accuracy (comparable to scope 1 and scope 2) the for this sub-category. However, other Scope 3 emissions associated to purchased good and services have been reported in the specific categories (i.e. emissions from upstream transportation and distribution). In order to improve in defining a consistent accounting and reporting system for Scope 3 emissions, Eni has developed its own procedure according to WBCSD-WRI "Corporate Value Chain (Scope 3) Accounting and Reporting Standard". The procedure updated in 2015 include the 15 categories and for several of them describes the related methodologies implemented by Eni for calculating Scope 3 emissions associated to its value chain. In order to define a consistent accounting and reporting system for scope 3/suppliers selection of significant emission the main followed steps are: 1) identification of outsourced activities and materials that impact in terms of GHG emissions; 2) Identification of the main contractors list that impact on Company's Climate Change Strategy; 3) request of GHG emission associated with the definition of specific KPIs per each Company's outsourced activities and activity sector.
Capital goods	Not relevant,				Until 2014, Eni joined the Carbon Disclosure

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
	explanation provided				Project-Supply Chain initiative in order to increase the awareness of its organization's carbon footprint. The Eni's suppliers involved in the CDP- SC process have been 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 joined an IPIECA working group having the task to develop an overview of methodologies for estimating and reporting petroleum industry Scope 3 GHG emissions. The IPIECA overview of methodologies has been published in June 2016, so Eni will assess the materiality of the guideline for each category in order to better improve the Scope 3 Reporting for the next year
Fuel-and-energy- related activities (not included in Scope 1 or 2)	Relevant, calculated	5996355	This figure refers to GHG emissions from generation of purchased electricity that is sold to end users (trading activity). The activity data refer to purchase of electric energy from third party (about 14.2 TWh). For the calculation the national grid emission factor has been used (referring to Italy EF, source IEA Combustion Highlights 2014 Edition)	100.00%	
Upstream transportation and distribution	Relevant, calculated	1171214	The figure refers to GHG emissions from road and maritime transportation and distribution of products. According to the Eni	100.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			methodology for accounting and reporting Scope 3 GHG, (i) for the maritime sector, emissions calculation is based on fuel consumptions and on emission factors derived by International Maritime Organization. Activity data are provided by Eni trading and shipping division. (ii) for the road sector, the activity data (as distance, tonnes of products transported and number of trips) are provided by the logistic unit of Eni refining and marketing division. Regarding the emission factors, Eni refers to US-EPA Climate Leaders/ Optional Emissions from Commuting, Business Travel and Product Transport, may 2008		
Waste generated in operations	Not relevant, explanation provided				Waste generated in operations is a minimal scope 3 emissions source in the oil & gas sector, especially if compared with the most relevant categories (use of product sold). So this category is not relevant by size. Moreover, Eni has been involved in an IPIECA working group having the task of develop a specific guidance sector for calculation and reporting of all Scope 3 emissions categories. The IPIECA overview of methodologies has been published in June 2016, so Eni will assess the materiality of the guideline for each category in order to improve the Scope 3 Reporting for next year. With this aim, Eni will conduct an assessment to identify potential

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					relevant emission sources coming from wastes generated in operations. Since this category may be relevant for the stakeholder, Eni is trying to estimate the emissions related to waste, assuming that the main sources are treatment, disposal and transportation
Business travel	Not relevant, calculated	47346	According to the Eni methodology for accounting and reporting Scope 3 GHG, the activity data (as distance, transport type, number of travels) are provided by the internal travel Agency and by the internal services' company. Regarding the emission factors, Eni refers to US-EPA Climate Leaders/ Optional Emissions from Commuting, Business Travel and Product Transport, may 2008.	100.00%	Eni, in order to reduce environment impact from business travel, included GHG emissions, is encouraging videoconferencing system. Since 2005, Eni headquarters can rely on fixed videoconferencing systems in meeting rooms and smaller portable systems that have been installed video calls, integrated with the VoIP phone system, are also available
Employee commuting	Not relevant, explanation provided				Despite Eni has not yet calculated GHG emissions from employee commuting, assuming that are not relevant by size, several initiatives have been implemented. The main one is the institution of a Mobility Management Service, in order to address in an integrated way the management of mobility home-work of the Eni's employee, in a perspective oriented to the environmental protection and to the reduction of CO2 emissions caused by individual travelling. Specific agreements regarding bike sharing, car sharing and discounts on public transport card have been signed since 2010. Furthermore, since 2012 a dedicated service for

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					employees moving from airport to Eni's office in Milan is available.
Upstream leased assets	Not relevant, explanation provided				Emissions from this category are not expected to be material and relevant for the oil&gas sector. Eni reports GHG emissions with the operational control approach, so potential emissions sources like office spaces and other operated facilities are included in scope 1 and scope 2. Moreover, Eni joined an IPIECA working group having the task to develop an overview of methodologies for estimating and reporting petroleum industry Scope 3 GHG emissions. The IPIECA overview of methodologies has been published in June 2016, so Eni will assess the materiality of the guideline for each category in order to better improve the Scope 3 Reporting for the next year.
Downstream transportation and distribution	Not relevant, explanation provided Not relevant.				Emissions related to transportation and distribution of product sold by the company are accounted in category "upstream transportation and distribution", as this activity is managed by a company within Eni's operational boundary (Eni trading and shipping division). Emissions from transportation and distribution of other products sold to external customers (crude oil and natural gas) are not calculated as route data are not available and also because Eni cannot control the emissions and hasn't the opportunity to implement reduction projects. Eni is an integrated O&G company and only a
Processing of	NOL TELEVALL,				En is an integrated OxG company and only a

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
sold products	explanation provided				portion of our upstream products are processed in our refineries and gas processing plants. Despite it is possible to estimate (with an high level of uncertainty) the GHG emissions related to processing of these products, Eni cannot control the emissions (generated in third parties plant) and hasn't the opportunity to implement reduction projects, so this category should be assumed as not relevant, also if it is likely to be relevant by size.
Use of sold products	Relevant, calculated	238258965	Starting from this year, Eni as an integrated O&G company, adopts for this relevant category the new approach developed by IPIECA and based on where the largest total amount of potential sold products is transferred. We have calculated the total volume of products at different stage along our value chain (production, refinery throughput and retail sales) for the combined relevant products (petroleum products and natural gas). According to this, Eni has calculated scope 3 emissions on the basis of upstream production (the bigger one), assuming a standard composition of final sold products derived from the standard oil barrel (source IEA). GHG emissions are estimated by multiplying the amount of single oil products (derived from crude oil) and natural gas, by the relevant	100.00%	As explained in the methodology box, the estimation is based on total equity production of crude oil and natural gas. In order to improve clearness, consistency and transparency, Eni has done also the calculation of Scope 3 GHG emissions based on the sales approach (natural gas and refined oil products) that are commercialized with the Eni Brand. On this basis, and excluding any contribution derived from trading activities, the GHG emissions estimated are about 200 million tonnes CO2eq.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			average emission factors, using the same recognized for EU Emission Trading Scheme Regulation. In order to improve the accuracy of estimation, Eni will assess more in detail the features and parameters of specific products in order to provide an higher tier of calculation for next year (also to keep in consideration the CDP approaches suggested in the guidance on Category 11).		
End of life treatment of sold products	Not relevant, explanation provided				Eni doesn't account Scope 3 emissions from this category because the main products are petroleum products that are consumed during use (gasoline, diesel, natural gas). Eni produces also lubricants (motor oil) and plastics. Regarding lubricants, in Italy there is a mandatory consortium that manages the collection of the lubricating oil and its proper disposal, which can take place through re-refining, combustion or incineration. Furthermore, the consortium promotes public awareness initiatives, which encourage citizens to adopt a more eco-friendly conduct. Only a very small portion of waste lubricating oil is thermally destroyed because non-recyclable, so the related emissions are not relevant by size
Downstream leased assets	Not relevant, explanation provided				Eni doesn't account Scope 3 emissions related to capacity rights at installation not owned and not operated by the company. The reasons is that, besides the lack of data, Eni cannot control the

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					emissions (generated in third parties plant) and hasn't the opportunity to implement reduction project, so this source should be assumed as not relevant, also if it is likely to be relevant by size. Eni is involved in an IPIECA working group having the task of develop a specific guidance sector for calculation and reporting of all Scope 3 emission categories. With this aim, Eni is conducting an assessment to identify other potential relevant sources falling in this category. At this moment, Eni has only estimated the GHG emissions from the initiative Enjoy, a car sharing free floating with the objective of developing products and services for sustainable mobility. This service allows the customers to pick up and release in any part of the covered area and represents an economic, sustainable and efficient alternative to owning car.
Franchises	Not relevant, calculated	26583	The figure refers to GHG emissions estimate from branded service stations. Data activity (tonnes of sold product) are taken from Eni fact book 2015. The emissions are estimated assuming an average electricity consumptions for kg of product sold (source database Ecoinvent)	100.00%	
Investments	Not relevant, explanation provided				Eni hasn't yet accounted Scope 3 emissions from this category. The main sources are the investment service for the business and the joint- venture and ownership shares in facilities not operated. For both sources, Eni cannot track the

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Other (unstream)					GHG emissions (generated in third parties plant) and hasn't the opportunity to implement reduction project, so this source should be assumed as not relevant, also if it is likely to be relevant by size. Moreover, Eni has been involved in an IPIECA working group having the task of develop a specific guidance sector for calculation and reporting of all Scope 3 emissions categories. The IPIECA overview of methodologies has been published in June 2016, so Eni will assess the materiality of the guideline for each category in order to improve the Scope 3 Reporting for next year
Other (upstream)					
Other (downstream)					

# CC14.2

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

Third party verification or assurance process in place

# CC14.2a

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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/34/5634/Climate Change 2016/Shared Documents/Attachments/CC14.2a/Eni GHG 2015 Verification Statement Scope 123.pdf	Page 1	ISO14064- 3	100

## CC14.3

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

Yes

## CC14.3a

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

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased goods &	Change in	85.8	Increase	The strong increase respect to 2014 is due to the exclusion, starting from 2015, of the

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
services	boundary			former controlled engineering & construction subsidiary, that provides, as a major supplier, a substantial contribution in terms of drilling operation for Eni. Consequently, Eni from 2015 accounts that portion of emissions in Scope 3. Note that the figure for 2014 has been revised (the updated value is 206391 tonnes CO2eq) for taking into account of the new GWP used.
Fuel- and energy- related activities (not included in Scopes 1 or 2)	Emissions reduction activities	4.6	Decrease	Since 1st April 2015, Eni has purchased 1174279 MWh Guarantees of Origin; by 31st March 2016 all of these were annulled for Eni's customers. Respect to 2014 (when 503704 Mwh were annulled for Eni's customers) this year additional 670575 Mwh were annulled for Eni's customers; the last figure corresponds to about 283369 tCO2eq of Scope 3 emissions, that can be considered as avoided Scope 3 emissions related to electricity trading activities. The reduction percentage of 4.6% is the results of the ratio: 283369/6181216 The figure for 2014 has been revised (the updated value is 6181216 tonnes CO2eq) for taking into account of the new GWP used.
Business travel	Emissions reduction activities	21.4	Decrease	In 2015, Eni reduced GHG emissions from business travel, increasing the use of videoconference systems. Note that the figure for 2014 has been revised (the updated value is 60254 tonnes CO2eq) after the exclusion of the formed controlled E&C subsidiary and for taking into account of the new GWP used.
Use of sold products	Change in output	10.2	Increase	According to the new IPIECA methodology, the figure for 2014 has been revised to 216256262 tonnes CO2eq. The increase in 2015 is due to the growth of crude oil and natural gas equity production

# CC14.4

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

Yes, our suppliers Yes, our customers

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

Eni has always been committed to choosing suppliers and contractors with appropriate professional skills and who share its corporate values. Since 2010, Eni joined several initiatives and related working groups (e.g. CDP Supply Chain - until 2014 - and the IPIECA Task Force Supply Chain) with the aim of moving beyond the measurement of direct greenhouse gas emissions to include climate change risks and opportunities and improve the Eni accounting and reporting process of indirect emissions across its supply chain.

Furthermore, Eni has developed its own methodology according to WBCSD-WRI "Corporate Value Chain (Scope 3) Accounting and Reporting Standard", updated in 2015.

#### HSE Qualification Process:

Suppliers are subject to qualification procedures, audits (based on the sensitivity of their activities) and performance evaluation processes.

The supplier qualification phase aims to assess, verify and monitor the technical and managerial skills, and the ethical, economic and financial reliability of a supplier on the basis of objective elements. In particular, selection is carried out by evaluating also the environmental protection initiatives and performance.

Eni adopts a centralized Qualification Process that evaluates all potential vendors by means of specific questionnaires and documents, by specific audits and checklist. The qualification model introduces a "risk based" approach to qualification and integrates HSE criticality as a risk category (linked to the specific nature of each single Commodity Class) which contributes towards the overall vendor assessment. The qualification questionnaire includes the HSE section with questions on Carbon Management emissions, as well on relevant environmental aspects.

The strategy for prioritizing engagement, for HSE qualification process, is based on the the following parameters: safety performance, carbon footprint of products, waste and water management. In the carbon footprint section, information regarding figures, target and strategy are collected

Eni adopted specific procedures applied to the "vendor management" and in particular disciplines the drawing up of execution feedback on HSE aspects. These procedures define the logics, criteria and operating methods for performing the vendor qualification process concerning the assessment of HSE and Quality requirements.

As a tool for measuring success, Eni has developed a specific procedure relative to the processing and management of feedback on the vendor. It defines the operating procedures for drawing up feedback on vendors concerning HSE aspects.

In 2016, Eni is planning to launch a cross-functional project on Green Procurement with the aim to:

- strength its own strategy for low carbon and renewables developments with promoting investments in energy efficiency
- promote technological innovation through the choice of goods and high-tech services with improved efficiency and effectiveness
- meet the requirements of the management systems that require to consider the entire supply chain with a Life Cycle perspective approach

Regarding customer engagement, Eni is strongly committed to promoting awareness among its consumers about the principles of sustainable consumption, relative to the diffusion of environmentally friendly behaviour and the importance of energy efficiency.

#### CC14.4b

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

Number of suppliers	% of total spend (direct and indirect)	Comment
9300	100%	In 2015, some 9,268 suppliers worked with Eni worldwide (source: https://www.eni.com/en_IT/sustainability/stakeholder-relations/enis- relations-with-suppliers.page) According to the process described in question CC14.4a, all the suppliers are subject to qualification procedures; the qualification model introduces a "risk based" approach to qualification and integrates HSE criticality as a risk category (linked to the specific nature of each single Commodity Class) which contributes towards the overall vendor assessment. The qualification questionnaire includes the HSE section with questions on Carbon Management emissions, as well on relevant environmental aspects. Additional focus on HSE aspects is conducted on critical categories of suppliers (according to the "risk-based" model)

# CC14.4c

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

How you make use of the data	Please give details
Other	As part of the qualification process Eni collects more detailed information related to its suppliers' GHG emissions and climate change strategies from the suppliers which qualification process is performed for a Group of Commodity with a certain HSE criticality,

## CC14.4d

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

## **Further Information**

# Module: Sign Off

Page: CC15. Sign Off

# CC15.1

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

Name	Job title	Corresponding job category
Rosanna Fusco	<b>Environment Vice President</b>	Environment/Sustainability manager