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 73 Countries around the world.
Eni's portfolio of conventional oil assets with a low break-even price reference as well as the quality of the resource base with options for anticipated monetization represent the competitive advantages of Eni's upstream business. The large presence in the gas and LNG markets and know how in the refning business enable the company to catch joint
opportunities and projects in the hydrocarbon value chain.
Eni's fundamentals, such as the high portion of gas reserves and the opportunity to grow in the renewable sources segment, leveraging on synergies with Eni's industrial plants,
will sustain the path of the business model to a low carbon scenario. Eni's strategies, resource allocation processes and conduct of day-by-day operations underpin the delivery of
sustainable value to our shareholders and, more generally, to all of our stakeholders, respecting the countries where the company operates and the people who work for and with Eni.
Our way of doing business, based on operating excellence, focus on health, safety and 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).

Enter Periods that will be disclosed
Fri 01 Jan 2016 - Sat 31 Dec 2016

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

Select country
Luxembourg
Netherlands
Norway
Portugal
Romania
Slovakia
Slovenia
Spain
Switzerland
Turkey
United Kingdom
Algeria
Angola
Egypt
Gabon
Ghana
Morocco
Mozambique
Nigeria
Tunisia
India
Indonesia
Iraq
Kazakhstan
Kuwait
Malaysia
Oman
Pakistan
Russia
Saudi Arabia
Singapore
Taiwan
Turkmenistan

Select country
Ukraine
United Arab Emirates
Vietnam
Argentina
Canada
Ecuador
Mexico
Trinidad and Tobago
Venezuela
Congo, Republic of the
Myanmar
Greenland
Kenya
Libya
Liberia
South Africa
South Korea
Denmark
Sweden
Poland
Montenegro
Cote d Ivoire
Japan
Jordan
Timor Leste
Puerto Rico

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, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.
If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS 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 in CC0.6.

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", 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 2016, the "Sustainability and Scenarios Committee" supported the BoD in the assessments related to climate change by addressing the issue in 6 of the 10 meetings, focusing especially on the energy scenarios and development of renewable sources.

Eni’s BoD defines the nature and level of risk consistent with the strategic objectives, including in its assessment all risks that can become relevant in terms of sustainability of Eni's activity in the medium to long term; in addition, through the “Control and Risk Committee” it 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 (updated July 2016) 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 others departments in identifying, assessing and monitoring risks related to climate change.
The results of assessment and monitoring activities of the IRM process are presented quarterly 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 the “Control and Risk Committee” and BoD quarterly 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 Remuneration Policy includes objectives on GHG mitigation. 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 Severity Incident Rate (SIR). For more info: https://www.eni.com/docs/en_IT/enicom/company/governance/shareholders-meeting/2017/Remuneration-Report-2017.pdf

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Management group	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target	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.

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 and categorised as a strategic risk. 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. IRM assessment and monitoring results are presented to the Control and Risk Committee and to the BoD quarterly.

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 and categorised as a strategic risk.
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 due 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 qualitative and quantitative analysis the risks are segmented into three groups (tier 1, tier 2 and tier 3) with different relevancy based on different level of materiality and probability to occur.

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

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

Eni acknowledges the challenge posed by climate change and the need to limit the temperature increase below 2°C.
In the next decades energy demand will continue to grow, driven by demographic and economic development in emerging economies. In this framework, renewable energies will have an increasingly important role in the energy supply, but cannot immediately replace hydrocarbons in all the sectors due to various technical and economical limits. In this framework, natural gas, will continue to meet a key part of global energy demand, even in a lower carbon scenario.
Eni long-term vision is that the energy sector 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 energy, and
- to guarantee that this happens in an environmentally sustainable way, limiting the increase of temperature to below 2°C.

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 2016, Eni reduced direct emissions by 31% (18.3 MtCO2eq).
2. to maximise the use of gas as a fuel of choice in a scenario of decarbonisation, particularly for electricity generation, but also for transport. Natural gas 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.
3. to promote the development of renewable energies, supporting their spread in the countries where we operate, and stimulating technological research.

i) Starting from 2014, "Sustainability and Scenarios Committee" of BoD evaluates Eni's climate objectives and performance. From 2015, the achievement of a CO2 reduction target in line with the main carbon intensity target (-43% by 2025 vs 2014) is part of the variable annual remuneration incentive of the CEO and climate risks are addressed in the Integrated Risk Management process. In 2015 Eni launched a Climate Change Programme, aimed at improving the company GHG performances. In 2016 the Program has been updated in order to the define a road map for Eni long-term decarbonization.

ii) The most relevant example of a change in Eni’s business strategy is the establishment of Energy Solution business line, dedicated to support and supplement traditional energy sources by producing renewable energy through profitable projects on an industrial scale (such as photovoltaic projects in Algeria, Ghana, Egypt, Pakistan, Tunisia and Italy).

iii) The main drivers that are influencing Eni’s strategy are: the entry into force of the Paris Agreement and the development of carbon pricing debate; the environmental advantages of flaring down, energy efficiency and methane fugitive reduction; the increase of low carbon and green products and renewables demand and finally the increasing pressure on climate-related disclosure.

iv) Short terms (<5 years) strategy pillars are: active role in climate debate, flaring down projects, methane fugitives reduction LDAR campaigns and operational energy efficiency measures. Eni focuses exploration activities in geological structures with high probability to find conventional resources only, without entering in unconventional oil business.

v) Long terms (≥5 years) strategy pillars are: promotion of natural gas, development of green downstream, investments in renewables, research on 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 into a modern bio-refinery. With the same approach Eni is converting also the Gela refinery. Regarding power renewables, Eni has planned to invest about 550 M€ in the next 4 year, equivalent to 463 MW installed capacity. As per physical risks of climate change, Eni structural requirements are compliant with international standards and rthe designed structures have a sufficient strength to overcome 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).

vi) 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 impacts on the assets value. Indeed, conventional hydrocarbons account for 99% of the 2016 Eni equity production and most of the resource base. Eni has decided not to invest in projects with a high CO2 content, such as tar sands, preferring instead conventional resources and, where possible, Near Field resources in order to find synergies with existing facilities. In combination with the focus on simple and modular projects, to maximize flexibility and optimize expenditure and exposure, Eni has managed to bring the average break-even price of its projects down from $45 (41 €) to $30 (27 €) of barrel Brent equivalent, one of the lowest of all its peers. 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.

vii) In 2016 large scale projects for generating power from renewable sources were identified and launched in Italy and across the world. In Italy, Eni has launched "Progetto Italia" which involves the development of plants (mainly photovoltaic) in its industrial areas. Eni has identified 14 projects for an overall capacity of about 220 MW which will be installed across the nation by 2022. At international level, Eni has identified projects to be developed in Countries where it has strategic interest (especially Africa and Asia) with the aim of increasing energy efficiency, the sustainability of Eni's consumption and improve local populations' access to energy using a more sustainable energy mix. A series of cooperation agreements have been concluded with Ghana, Algeria and Tunisia to strengthen Eni's long-standing presence in these Countries and broaden its sphere of activities.

viii) Eni commitment in investments on renewables has been stimulated by the entry into force of Paris Agreement.

ix) In 2016 Eni has performed a review of the recoverability of the book values of the Company's oil&gas assets under the assumptions of the IEA 450 Scenario. Looking at 2030, the aggregate impact under the IEA's 450 Scenario would be positive overall for Eni compared with our own outlook.

CC2.2b

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

CC2.2c

Does your company use an internal price on carbon?

Yes

CC2.2d

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

To test the resilience of new projects, we assess potential costs associated with GHG emissions when evaluating all new capital projects. Our approach applies a uniform cost of €40 (real terms) per tonne of carbon dioxide equivalent to the total GHG emissions of each investment.
This review has concluded that the internal rates of return of our ongoing projects will be only marginally affected by a carbon pricing mechanism. The project development process features a number of checks that may require development of detailed GHG and energy management plans. High-emitting projects undergo additional sensitivity testing, including the potential for future CCS projects. Projects in the most GHG-exposed asset classes have GHG intensity targets that reflect standards sufficient to allow them to compete and prosper in a more CO2 regulated future. These processes can lead to projects being stopped, designs being changed, and potential GHG mitigation investments being identified.

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
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.	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 able to give a strong price signal to the CO2 and a clear framework regarding free allocation for industrial installations facing carbon leakage risk.
Other: Emission Performance Standard	Support	In 2016 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.

CC2.3b

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

Yes

CC2.3c

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

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
IPIECA	Consistent	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 welcomes the Paris Agreement and sees it as a crucial step in global efforts to address climate change. It is the culmination of 6 years of efforts by nations to reach a new agreement, during which efforts deployed by all stakeholders – governments, business and civil society – have intensified and contributed to reaching an ambitious outcome. IPIECA had called for an effective and clear agreement as part of its Paris Puzzle communication in the run-up to the conference. The agreement is an important milestone that will send a strong signal going forward, but more work and action by all stakeholders will be needed going forward. IPIECA will continue to play its role and will be assessing the implications of the Agreement and the ongoing IPIECA work programme for the industry. IPIECA supports and encourages governments in their efforts to reduce GHG emissions. Meeting the climate change challenge will require actions from all parts of society, including governments, civil society and the private sector. We believe it is possible to address climate	Eni's SVP Environment and Climate Change was member of the Executive Committee of IPIECA. 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 etc.).

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
		change risks whilst also meeting growing global energy demand and supporting economic development. The oil and gas industry must be a key part of the solution. For more info: http://www.ipieca.org/focus-area/climate-change	
IETA	Consistent	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	Eni has been member of IETA for many years and participates in the EU and International Working Groups activities.

CC2.3d

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

The participation in international climate initiatives has an important role in Eni's engagement on climate change.

Eni is proud to be 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 2016, the CEOs of the OGCI companies confirmed their commitment at an event in London, announcing a joint investment of $1 billion over 10 years for the development of technologies capable of reducing GHG emissions along the Energy value chain. Technological deployment will cause the OGCI's investment to have a multiplier effect on the low-carbon economy, with the expected aim of reducing global GHG emissions by 1 Gt CO2 over the next ten years. 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 led by CEOs who 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.

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.

Eni is a member of 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. The aim of this Task Force is to develop international recommendations and guidelines on the disclosure of risks associated with climate change. The Task Force's first draft recommendations were published in December 2016 and were finalized in 2017 June 29th after a period of public consultation.

Eni is member of the World Business Council for Sustainable Development (WBCSD): inside this organization Eni actively participates in the Climate change working groups promoting new standards and policies to fight climate change.

Eni continues to work together with other O&G companies within the "Carbon Pricing Leadership Coalition", a public-private initiative aimed at building an effective dialogue on Carbon Pricing with governments and companies around the world.

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?

In terms of organizational processes, 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 with Eni's Business strategies is ensured through dedicated working groups focused on climate issues such as the Climate Change Programme, which involves all the interested departments. 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. 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	12.68%	100%	2014	5327942	2025	No, but we anticipate setting one in the next 2 years	This target refers to the commitment of Eni in the Global Gas Flaring Reduction initiative (GGFR) "Zero Gas Flaring @2030" initiative. The target refers to routine process flaring emissions and Eni is committed to anticipate this achievement in 2025. The target is also published in Eni Sustainability Report (Eni for 2016, pag. 16). Despite this target refers to 2014 as base-year, Eni has been strongly committed for many years to implement flaring down projects and, compared with 2007, Eni has already reduced the total volume of flared gas by more than 70%.
Abs2	Scope 1	6.9%	80%	2014	2894206	2025	No, but we anticipate setting one in the next 2 years	This target refers to the engagement of Eni in reducing methane emissions associated with its industrial operation. Eni is committed to achieve a reduction of upstream methane emissions by 80% by 2025 compared to the estimated 2014 value, , thanks to the start of specific campaigns to identify fugitive methane emissions from plants and related maintenance and leakage elimination (so-called Leak Detection and Repair campaigns - LDAR) Eni upstream has already achieved reductions of over 43ktCH4 , equal to 1.1Mt of CO2eq estimated for the 2015-2016 period compared with 2014

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1	55.8%	43%	Other: Metric tonnes of CO2e per tonnes of operated oil equivalent production	2014	0.201	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 is published in Eni Sustainability Report (Eni for 2016, pag. 15). The target refers only to Upstream emissions, that in 2014 covered 55.8% of total Eni's GHG direct emissions. The target is also part of the Strategic targets as per 2017-2020 Strategy Presentation

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	No change	0	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 upstream emissions, for this reason scope 1 emissions of the other businesses and overall Eni's scope 2 emissions are considered flat in the period. This is only an estimation because it assumes that Eni's operated

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
					production growth is the same of Eni's public expectations on equity production growth, already communicated to investors. In case the operated production in 2025 would be equal to 2014, the % change in absolute emissions would be around -21%. Scope 2 are little material for Eni's figure (in 2016 approximately 0.7 MtCO2eq), because Eni has a dedicated business line dedicated to power generation and a part of this electricity is used for auto consumption, therefore related GHG emissions are already included among direct emissions. Regarding % of change in Scope 3 emissions, we are still evaluating potential benefits coming from the increase share of gas in our production portfolio.

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

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	18.2%	14.3%	In 2015, GHG emissions from routine flaring were 4564706 tCO2eq, with a reduction from the base year equal to 763236 tCO2eq. Despite this target refers to 2014 as base-year, Eni has been strongly committed for many years to implement flaring down projects and, compared with 2007, Eni has already reduced the total volume of flared gas by more than 70%.
Abs2	18.2%	46.6%	In 2016, Eni Upstream methane fugitive emissions accounted for 1816089, with a reduction from the base year of 1078117 tCO2eq, corresponding to 46.6% of the total reduction target expected for 2025 (-80%)
Int1	18.2%	39.6%	In 2016, Eni Upstream GHG direct emissions accounted for 20366806 tCO2eq and operated hydrocarbon production reached 122405565 toe, with an intensity indicator (tCO2eq/kboe) reduction of 17% respect 2014. Up to 2016, results accounted for about 39.6% of the total reduction target expected for 2025 (-43%).

CC3.1f

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

CC3.3a

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

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	14	780000
Implementation commenced*	18	655554
Implemented*	60	1038224
Not to be implemented	0	0

CC3.3b

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

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	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	452786	Scope 1 Scope 2 (location-based)	Voluntary	59833500	2000000	<1 year	11-15 years	19 projects, involving the saving of 452786 tCO2/y of direct emissions. The investment was estimated since some projects were part of larger projects. Annual monetary savings were estimated assuming 300 €/toe for fuels and 50 €/MWh for electricity.
Energy efficiency: Processes	Energy efficiency projects implemented in refining activities	65047	Scope 1	Voluntary	6504000	13148460	1-3 years	11-15 years	17 projects. Annual monetary savings were estimated assuming 300 €/toe for fuels and 50 €/MWh for electricity.
Energy efficiency: Processes	Energy efficiency projects implemented in petrochemical activities	40580	Scope 2 (location-based)	Voluntary	2023827	7609000	4-10 years	11-15 years	2 projects avoiding the consumption of 6757 toe/y and increasing electrical consumption of 350 MWh/y. Annual monetary savings were estimated assuming 300 €/toe for fuels and 50 €/MWh for electricity.
Energy efficiency: Processes	Energy efficiency projects implemented in	10490	Scope 1 Scope 2 (location-	Voluntary	1254900	2017000	1-3 years	11-15 years	3 projects avoiding the purchase of 6000 MWh per year of steam and 10490 tCO2/y. 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
	power generation activities		based)						savings were estimated assuming 300 €/toe for fuels.
Fugitive emissions reductions	Implementation of monitoring campaigns in several major gas facilities worldwide.	469321	Scope 1	Voluntary					Evaluations on the economical return of the project are still ongoing.

CC3.3c

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

Method	Comment
Internal price on 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.

CC3.3d

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

Further Information

Page: CC4. Communication

CC4.1

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

Publication	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	Eni Integrated Annual Report 2016: pag 10, 13, 14, 16, 17, 18, 20, 22, 24, 26, 32, 48, 75, 86	https://www.cdp.net/sites/2017/34/5634/Climate Change 2017/Shared Documents/Attachments/CC4.1/Eni Integrated-Annual-Report-2016.pdf	Page numbers refers to the numeration of the attached file.
In voluntary communications	Complete	Eni Sustainability Report 2016: Section "Path to Decarbonization" pag 12-27	https://www.cdp.net/sites/2017/34/5634/Climate Change 2017/Shared Documents/Attachments/CC4.1/Eni Sustainability Report 2016 - EniFor.pdf	Page numbers refers to the numeration of the attached file.
In voluntary communications	Complete	Eni Sustainability Performance 2016: Section "Energy and Climate" pag 11-13	https://www.cdp.net/sites/2017/34/5634/Climate Change 2017/Shared Documents/Attachments/CC4.1/Eni Sustainability Performance 2016 - EniFor.pdf	Page numbers refers to the numeration of the attached file.
In voluntary communications	Complete	Eni website		Eni climate strategy and performances are described in detail in the corporate website. Form more info: https://www.eni.com/en_IT/sustainability/climate-change-and-new-forms-of-energy.page

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 2016, more than half of Eni's direct GHG emission were under carbon pricing regulatory schemes (essentially: EU-ETS). Following the debate on carbon pricing and the progressive implementation of	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 screening value of 40 $/tCO2 (36 €/tCO2), the associated impact	Eni is strongly committed to reduce the carbon intensity of its operations and various inter-related measures have been adopted to reach such goal. The main levers of intervention are reduce gas flaring,	As an estimation, compared with 2007, Eni has reduced the total volume of flared gas by more than 70% and the overall amount invested in these projects

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	National Determined Contribution in the context of Paris Agreement, 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.						would be equal to 800 M€/year. However, this is only a sensitivity, because it doesn't take into account the possible offset of carbon tax against other kind of corporate taxes and also the fact that most of Eni's emission not covered by carbon pricing are located in Countries, where the likelihood of a carbon tax implementation in the next 3 to 6 years is very low.	reduce fugitive methane emissions and increase energy efficiency. On flaring, Eni has a program to reduce gas sent to flaring through production of electricity for local populations, distribution for domestic consumption or export. Where these practices are not possible, Eni creates re-injection systems in natural gas reservoirs. Since 2003, Eni has been part of the Global Gas Flaring Reduction (GGFR) initiative, and is committed to the goal of zero routine flaring by 2025, 5 years earlier than scheduled in the initiative. On methane emissions, specific campaigns are ongoing to identify	exceeds 2 B$ (1.8 B€). Regarding the future and again on flaring, expected investments of over €500 million by 2020.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								fugitive methane emissions from plants and related maintenance and leakage elimination (so-called Leak Detection and Repair campaigns - LDAR). Moreover, Eni is engaged in the voluntary international initiative Climate and Clean Air Coalition Oil and Gas Methane Partnership (CCAC-OGMP), and presented a methane emissions control program which involves establishing monitoring campaigns over the next 10 years to cover the most important upstream sites and to report the achieved results. Eni is committed to an 80% reduction of Upstream fugitive emissions by 2025	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								vs the estimated 2014 value.	
International agreements	Following COP21 and entry into force of Paris Agreement, 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 likely to be felt by coal, oil & gas and energy companies, such as Eni. Consequently, a debate on carbon stranded asset risk has risen among certain investors. According to some observers, the	Reduced stock price (market valuation)	>6 years	Direct	About as likely as not	Medium-high	To test the resilience of new projects, we assess potential costs associated with GHG emissions when evaluating all new capital projects. Our approach applies a cost of $40 (real terms 2015) per tonne of CO2equivalent to the total GHG emissions of each investment. This review has concluded that the internal rates of return of our ongoing projects will be only marginally affected by a carbon pricing mechanism. Furthermore, management has performed a review of the recoverability of the book values of	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 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	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
	peak of stranded asset risk is associated to oil & gas projects at higher break-even price and CO2 content.						the Company's Oil&Gas assets under the assumptions of the IEA 450 Scenario. Our preliminary view, looking at 2030, is that the aggregate impact would be positive overall for us compared with our own outlook. This is primarily due to the higher oil and gas prices assumed by the IEA. While the IEA assumes significant global CO2 costs of $133/tonne (in nominal terms) in 2030, our portfolio sensitivity to oil and gas prices exceeds our sensitivity to CO2 costs associated with our GHG emissions.	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. Moreover, regarding future oil price scenario, Eni's assumption in the long term is in the lower range of industry estimates and well below the assumptions of IEA New Policy and 450 scenarios. This price is used to	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								assess project economics, before sanctioning. In addition to that, we apply also an internal carbon pricing sensitivity of $40/ton for tCO2 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
Tropical cyclones (hurricanes and typhoons)	Tropical cyclones such as hurricanes or typhoons could cause damages to installations and may imply reduction/disruption of production activities and/or interruption of supply chain. This	Reduction/disruption in production capacity	Up to 1 year	Direct	Likely	Medium-high	Eni's is currently performing in-depth analysis to estimate the financial implications of this risk driver. Eni's entities are insured against	The assesment of physical climate-related risks is included into the Integrated Risk Management process of Eni. Moreover, in order to manage	The greatest part of these costs are related to insurance fees which are included in complex contracts that cover different items.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	risk may impact in terms of supply and transport interruptions, cost of maintenance, cost of insurance and investment in infrastructures. Eni has identified operations and facilities in regions exposed to hurricanes and tornados and the most susceptible assets are the offshore installations in the Gulf of Mexico.						liabilities for damage to third parties and environmental claims up to $1.2 billion (1.1 B€) in case of offshore incident and $1.4 billion (1.3 B€) in case of incident at onshore facilities (refineries). In addition, the Company may also activate further insurance coverage in case of specific capital projects and other industrial initiatives. With reference to the Gulf of Mexico, Eni holds interests in 84 exploration and production blocks in the	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 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	Therefore it is not easy to determine the amounts of these additional costs. The costs related with CMCC adaptation project amounted to 120 k€ in 2016.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							shallow and deep offshore, of which 44 are operated by Eni. In 2016 Eni's production in the Gulf of Mexico was about 60 kboe/d, if we estimate one month interruption of the half of Eni's Gulf of Mexico production the related financial impact would be about 80 M€.	Fixed Offshore Platforms). The best example of asset resilience to extreme weather conditions is Goliat FPSO, which is a tailor-made asset, specially adapted to enable safe and reliable oil production under harsh weather conditions. With a long term perspective, was developed a special project with the Euro-Mediterranean Centre for Climate Change (CMCC) to define the environmental impacts, potential risk and possible adaptation measures in two areas of	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Eni's interest (Egypt and Mozambique). The study highlighted that no relevant climate-related events are expected until 2040 but it showed as a critic aspect the increase in intensity of the tropical cyclones in Mozambique canal.	
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. Therefore is essential to increase the awarness of energy companies about this potential risk and develope some	Reduction/disruption in production capacity	>6 years	Direct	More likely than not	Low-medium	Eni’s is currently performing in-depth analysis to estimate the financial implications of this risk driver. Regarding sea level rise, we have taken into account the risk related to the loss of recent investments for the revamping of	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. From project with CMCC on	Management costs related to sea level rise are not relevant for Eni. Regarding Venice's facilities, Eni has no equity in the Mose project. The costs for the study in adaptation project with CMCC were 120K€.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	adaptation measures. Eni with the collaboration of CMCC has determined the increased rates of sea level rise that could pose serious threat on coastal O&G facilities and operations. In particular, Eni's chemical and green refining plants in Porto Marghera (Venice, Italy) could be at risk for sea level rise and extreme tides fluctuations.						the chemical plant and the conversion of a traditional refinery into a bio-refinery in Venice (300 M€).	adaptation we evaluated possible environmental impacts in coastal zones (in Egypt) and potential adaptation measures for onshore and offshore infrastructure. Particularly Eni implemented a Coastal Vulnerability Index (CVI) a method to assess coastal vulnerability to sea level rise in particular due to erosion and /or inundation. Regarding Eni's facilities in Porto Marghera plant (Venice), the Mose public infrastructure for protecting the Venice Lagoon from extreme tides fluctuations and sea level rise.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								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 and entry into force of Paris Agreement, all stakeholders have increased their awareness on climate change and energy transition topics and this is specifically true for the Oil&Gas business sector. A general driver of reputation is	Reduced stock price (market valuation)	Up to 1 year	Direct	Very likely	Medium-high	Although they are significant to Eni, it's quite difficult to quantify financial implications related to reputational damages. Several research institutions are developing correlation analysis between stock price and	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	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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	related with the company commitment on disclosure on Climate-related topics, on which there's an increasing pressure. Eni's stakeholders main concerns are related to GHG emission reduction with a particular focus on gas flaring, energy efficiency improvement, investments in renewables and in general limiting activities with potential impact on climate-related topics, for example promoting a responsible use of water resources.						factors that may impact reputation, including climate change, but this models are generally fragile and affected by weak and arbitrary assumptions.	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. Eni was the first company in the world, in 2014, to convert a traditional refinery, in Venice, into a biorefinery. Eni has a goal of producing one million tonnes of biodiesel by 2020, thanks to the start-up of the Gela refinery, accounting for the entire Italian biofuel demand and investing over € 420 million in the process. Eni will also use innovative technology to produce energy and fuel from waste, animal fats and frying oils. In	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
								addition, in 2015 Eni engaged also in methane fugitive reduction and commercial renewables development. From 2016 Eni used RepRisk, that is an independent data provider, to monitor all ESG issues, including climate change. In addition Eni has developed an internal tool called ORM (On-line Reputation Monitoring) able to monitor in real time Eni reputation and specific stakeholders issues, including climate change. On 30st of September 2016 Eni held a special event with investors dedicated to ESG topics in which our CEO stressed the commitment and initiatives on climate change.	

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 changes in 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 entry into force will promote a solid institutional framework for the development of REDD+ projects (Reducing Emission from Deforestation and forest Degradation) and the use of relative credits for compliance purposes. These initiatives,	New products/business services	3 to 6 years	Direct	Likely	Medium	REDD+ projects could generate profits in terms of emission credits in voluntary market and benefits for human development and biodiversity with a great international positive feedback. Considering a credit value of 5 €/tCO2 and a medium size project	The developement of REDD+ project and use of offset credits for the voluntary compensation of direct emissions is a relevant part of Eni's 2025 action plan on climate change, as published in our sustainability report. Currently Eni is involving in two feasibility studies on REDD+ projects with CMCC. In 2016 was concluded the	Total expenditure to date related to studies performed by CMCC for REDD project amounts to less than 100 k€.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	regularly recognized by UNFCCC could deliver environmental and social benefits for local communities as well as carbon credits revenues. Eni has developed an integrated strategy to reduce impact of its activity on the environment and climate. Eni is providing to define a portfolio of initiatives such as a participation in third party funds with emission reduction certificates and development of offset projects (REDD+) in						delivering 100,000 credits/year could generate a yearly revenue of about 750 k€.	feasibility study on an Ecuador based project, focused on environmental and socioeconomic characterization underlying the benefits and opportunities of this REDD project.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	order to reduce part of direct emissions.								
Other regulatory drivers	Bio-fuel regulation is a strategic pillar of EU policy to reduce CO2 emissions. Member states have to commit to ensuring that, by 2020, 10% of energy consumption in the transport sector will be met by renewables. At the same time, economic crisis asked for a strong reduction of traditional refining capacity in Europe. Eni rationale had been to meet both requests reconverting	New products/business services	Up to 1 year	Direct	Very likely	Medium-high	Although it's difficult to quantify the financial implication related to the biofuels regulatory development, it will have a significant relevance to Eni. Through Green Refinery Projects in Venice and Gela, Eni will fully satisfy the captive needs of biofuels and will reach an improvement in operating results as consequence of the cost efficiency achieved through new green refinery	Eni was the first to convert a traditional refinery into a biorefinery through the conversion of a conventional plant for the production of low-environmental impact biofuels using its proprietary EcofiningTM technology. The biomass used for conversion into biofuel has been certified with the International Sustainability & Carbon Certification (ISCC) standard, which guarantees compliance with both environmental	The reconversion of the traditional Refinery in Gela (Sicily) into a green refinery is ongoing We target a processing capacity of 720 kt/year at completion of the project. Overall investment for both refineries is around €500M when including R&D.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	traditional refining capacity in production of bio-fuels. Indeed, Eni was the first company to reconvert a traditional refinery into a bio-refinery in Venice, leveraging on its proprietary Ecofining technology while maintaining occupational levels in depressed areas through low carbon innovation.						operative structures: reduction in overall variable and fixed costs, because of less than 1,5 mln ton of raw material processed versus 9 mln ton of crude oil and raw material processed in the previous traditional scheme. Although the biofuel scenario has been characterized by high volatility in the last 24 months, IRR (internal rate of return) of the project remain above the cost of capital.	and social requirements. After the Venice's investment, Eni will also work to turn Gela into a green refinery. From a sustainable point of view such approach guarantees not only a good employment level (direct and induced work), but emission reduction at the productive sites (less CO2, SOx, powders and ashes up to -50%) as well as water consumption (up to -50% and more). Green biofuels obtained are characterized by higher power (up to +10%), improving combustion efficiency, reducing	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								consumption (up to -5%) and gaseous emission (more than -30%). Eni is also continuing to invest in research into new bio components for use in fuels.	

CC6.1b

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in temperature extremes	The increase of extreme temperatures could affect sales of gas and open up new market opportunities for instance for air conditioning. The capability of optimization of	Reduced operational costs	1 to 3 years	Direct	More likely than not	Low-medium	Reliance on meteorological trends forecasts (i.e. temperature, pressure, humidity) helps obtaining competitive prices on the electric market thanks to better planning and management sales	Eni in collaboration with Centro Epson Meteo has developed the "Kassandra Meteo forecast" tool (e-kmf™), a proprietary advanced system for forecasting temperatures from	R&D capex for Kassandra Meteo Forecast (e-kmf®) was around €2.2 M in 2009-2016 with opex of around €150 k/y.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	natural gas storage and reserves vs. energy demand swings mitigates the risk of energy price increases. Analysis of temperature trends per geographies and of anomalous energy demand trends improve reserve storage as well as marketing and supply of energy sources. A reliable short-term weather forecast helps optimizing the production of heat and power in cogeneration plants (CHP) and reduces costs associated to the imbalance among charges on the national grid while improving the management of Eni's natural gas portfolio in Europe. Eni is involved in the						and supplies of energy sources. In addition, it helps reducing the unbalance among fees in the gas market in Italy. Expected benefits and risks mitigation associated to e-kmf™ eni - Kassandra Meteo Forecast are in the range of 1.0 M€/year.	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 is adopted since 2014 by Eni's power generation activity plants giving competitive advantage in terms of electricity production costs reduction. The adoption of e-kmf™ for Eni's renewables energy generation plants under feasibility, as well as the application at upstream offshore operations.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	gas&power retail market and, thanks to its subsidiary Enipower, is a major player in the Italian utility sector. In 2016, Eni power capacity production was 4.7 GW. Eni supplied 82.7 bcm of natural and sold 89 bcm worldwide. Eni relies on e-kmf™ [eni - Kassandra Meteo Forecast] to globally forecasting temperatures at different regional scales.								

CC6.1c

Please describe your 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	After COP21 and the entry into force of the Paris Agreement, there's an increasing awareness of stakeholders on climate change topics and this could be seen as an opportunity for companies committed to a low carbon energy transition, also with returns in terms of increased stock price. In particular, climate change reputation is manly related with: public commitment on emission reduction, investment for energy efficiency and renewables development and resilience of the business model to low carbon scenarios. Eni has identified strategic risks	Increased stock price (market valuation)	Up to 1 year	Direct	Very likely	Medium-high	Although they are considered significant to Eni, financial implications related to reputational upsides are in general very difficult to be quantified. Several research institutions are developing correlation analysis between stock price and factors that may impact reputation, including climate change, but this models are generally fragile and affected by weak and arbitrary assumptions.	Eni acknowledges the scientific evidence presented in the 5th Assessment IPCCC Report and the necessity to limit the rise in temperatures to less than 2°C. As one of the primary players in the energy sector Eni is aware of the need to play an important and responsible role in the fight against climate change and has defined a strategy for the reduction of GHG emissions that integrates operational and management action (such as flaring down projects, energy efficiency and methane fugitive monitoring campaigns) with ongoing technological innovation and research. Eni’s latest strategic updates to the market included the	Regarding this risk driver, the cost of management is part of the overall business model definition of Eni and it is not quantifiable. As an example, the overall investment on flaring down projects since 2007 exceeds 2 B$ (1.8 B€). On power renewables, Eni will invest in the next 4 years 550 M€ for developing 463 MW of installed capacity.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	related to climate change reputation, the risks management might turn to be opportunities if properly dealt.							traditional industrial and financial targets for the coming four years and our commitment on the long term goal on carbon footprint reduction (-43% of upstream carbon intensity by 2025 vs 2014), that we consider a top priority target. During Eni's 2016 Shareholders' Meeting, Eni's CEO firstly illustrated the comprehensive strategy developed as part of the company's contribution to the transition of energy towards a low-carbon future and announced our new and original model of integration between traditional business and renewable energy. On 30st of September 2016 Eni' CEO held an ESG presentation to investors on "Developing	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Sustainable Energy: Eni's Integrated Model" in which he has further elaborated on the company's integrated strategy for de-carbonization and how it is designed to reconcile financial robustness with social and environmental sustainability.	

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 changes in 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	Fri 01 Jan 2010 - Fri 31 Dec 2010	58357276
Scope 2 (location-based)	Fri 01 Jan 2010 - Fri 31 Dec 2010	1005539
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 (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	Emission Factor	Unit	Reference
Natural gas	0.00195	metric tonnes CO2 per m3	CO2: Natural Gas - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2016)
Distillate fuel oil No 1	3.142	metric tonnes CO2 per metric tonne	CO2: Fuel Oil - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2016)
Diesel/Gas oil	3.155	metric tonnes CO2 per metric tonne	CO2: Diesel - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2016)
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 2016)
Refinery gas	2.660	metric tonnes CO2 per metric tonne	CO2: Refinery fuel gas - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2016)
Natural gas	2E-05	metric tonnes CO2e per GJ	CH4 - API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and natural Gas

Fuel/Material/Energy	Emission Factor	Unit	Reference
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 Environmental Ministry for 2016)
Other: Flared Gas	58.291	metric tonnes CO2 per GJ	CO2: Flared gas (butane) - EU-ETS Reg. 601/2012 (revised by Italian Environmental Ministry for 2016)

Further Information

Eni operates in many activity sectors: exploration and production, refining and marketing, petrochemical manufacturing, power generation. 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 internal Eni's GHG operating instruction, 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 2016 - 31 Dec 2016)

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

40100992

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We have operations where we are able to access electricity supplier emissions factors or residual emissions factors, but are unable to report a Scope 2, market-based figure	According to internal procedures, Eni reports Scope 2 GHG emissions using the location-based approach. In some contracts, we have information about emission factors but currently we are not able to calculate a reliable market-based figure for all the operated

Scope 2, location-based	Scope 2, market-based	Comment
		assets. We are continuously improving our reporting system in order to include also the market-based approach in the future.

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
710558		Emissions resulting from purchases of electricity, steam and heat from third parties (Scope 2) are negligible for Eni since electricity is generated inside its plants and the related GHG emissions are included among direct emissions.

CC8.4

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

No

CC8.4a

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

Source	Relevance of Scope 1 emissions from this source	Relevance of 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

CC8.5

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

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 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: - CO2 emissions from combustion: variations in fuel gas composition; - CH4 emissions from venting and fugitive, applied average emission factors not always suitable for each type of installation; - 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)			

CC8.6

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	Limited assurance	https://www.cdp.net/sites/2017/34/5634/Climate Change 2017/Shared Documents/Attachments/CC8.6a/ISAE3410_ENI_GHG_INVENTORY_2016.pdf	Pages 1,2,3 and 25.	ISAE 3410	100

CC8.6b

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

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

CC8.7

Please indicate the verification/assurance status that applies to 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	Limited assurance	https://www.cdp.net/sites/2017/34/5634/Climate Change 2017/Shared Documents/Attachments/CC8.7a/ISAE3410_ENI_GHG_INVENTORY_2016.pdf	Pages 1,2,3 and 25	ISAE 3410	100

CC8.8

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

Additional data points verified	Comment
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 assurance process of Eni's GHG Inventory 2016. Eni's GHG statement provides a comparison between the emissions of 2014, 2015 and 2016. Data have been assumed essentially correct, as reported in the Assurance Statement attached in questions 8.6a and 8.7a.
Year on year emissions intensity figure	Year on year emissions intensity figures have been verified under the third party assurance process of Eni's GHG Inventory 2016. Eni's GHG Statement includes some key indicators for each sector of activity measured for the year 2016 and their variations compared to 2015 and 2014. 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 assurance process of Eni's GHG Inventory 2016. Eni's GHG statement provides a comparison between the emissions of 2014, 2015 and 2016. Data have been assumed essentially correct, as reported in the Assurance Statement attached in questions 14.2a.

CC8.9

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

No

CC8.9a

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

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

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
Italy	19508165
Europe	1421715
Africa	15154442
Americas	719221
Asia, Australasia	3297449

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	20366806
Gas & Power	11224526
Refining & Marketing	5449365
Petrochemical	3048529

Business division	Scope 1 emissions (metric tonnes CO2e)
Corporate and other activities	11766

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	96521		
Enipower Brindisi power plant	2371378		
Enipower Ferrera Erbognone power plant	2752418		
Livorno Refinery power plant	604114		
Enipower Ravenna power plant	1732616		
Enipower Ferrara power plant	1579538		
Enipower Mantova power plant	1696798		
Livorno Refinery	396825		
Sannazzaro Refinery	2959654		
Taranto Refinery	819649		
Taranto Refinery power plant	329940		
Venezia Refinery	378306		
Gela Refinery	29814		
Versalis Brindisi plant	472725		
Versalis Ferrara plant	19690		
Versalis Mantova plant	187620		
Versalis Porto Marghera plant	707620		
Versalis Porto Torres plant	80315		
Versalis Priolo plant	855800		
Versalis Ragusa plant	10326		

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Versalis Ravenna plant	33733		
Versalis Dunquerke plant	570920		
Versalis Grangemouth plant	53336		
e&p Barbara T1 platform	23497		
e&p Barbara T2 platform	77201		
e&p Cervia K platform	31698		
e&p Garibaldi K platform	22096		
e&p Firenze FPSO plant	89029		
e&p Casal Borsetti plant	30876		
e&p Fano plant	55477		
e&p Trecate plant	13063		
e&p Val d'Agri plant	479804		
e&p Crotone plant	52766		
e&p Gela Enimed plant	19346		
e&p Pineto plant	13822		
e&p Torrente Tona plant	103789		
e&p Hewett plant	46641		
e&p Goliat plant	210872		
RSI Sistema Rete Torce	1885		
LBOC - Point of Ayr Terminal	40827		
LBOC - Douglas	171251		
LBOC - Oil Storage Installation	3931		

CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	36796507
CH4	3122506
N2O	181978

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Combustion & Process	30968238
Flaring	5403225
Venting	1667015
Fugitives	2062513

Further Information

Ref. CC9.2b - The breakdown reported refers only to Eni's Installation included in EU Emission Trading System and it cover about 50% 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 73 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 2016 - 31 Dec 2016)

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	426998		1363241	
Europe	115717		692237	
Africa	158981		321830	
Americas	557		1599	
Asia, Australasia	8305		16370	

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, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Exploration & Production	228675	
Gas & Power	17002	
Refining & Marketing	89809	
Petrochemical	338028	
Corporate and other activities	37044	

CC10.2b

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

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

CC10.2c

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

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, 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 73 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	MWh
Heat	1497
Steam	750114
Cooling	0

CC11.3

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

139689178

CC11.3a

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

Fuels	MWh
Natural gas	109966833
Refinery gas	22264376
Liquefied petroleum gas (LPG)	99466
Motor gasoline	119245
Diesel/Gas oil	4171417
Distillate fuel oil No 4	537132
Other: Mostly fuel oil from catalytic cracking	2530706

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	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Energy attribute certificates, Guarantees of Origin	0	0	Since 1st April 2016 Eni has purchased 1322687 Guarantees of Origin. By 31st March 2017, 1306053 of these were annulled for Eni's customers.
Other	13398	0	The figure refers to electricity generated from photovoltaic plants owned by Enipower. Most of this electricity is sold to the grid.

CC11.5

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

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
6247365	1645170	25644000	13398	213	The figure refers to electricity generated from photovoltaic plants owned by Enipower. Most of this electricity is sold to the grid, while 213 MWh are consumed internally. Eni has planned to invest 550 M€ to build 463 MW of renewable capacity by 2020.

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

CC12.1a

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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	2.46	Decrease	Last year 1038224 tCO2e were reduced by Eni's emissions reduction projects, and the total Scope 1 and Scope 2 emissions in the previous year was 42179111 tCO2e, therefore Eni performed a reduction of 2.46%: (1038224/ 42179111)*100= 2.46% 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 flaring and methane fugitives emissions. Energy Efficiency (- 568903 tCO2eq) - The energy saving initiatives implemented in Eni between 2008 and 2016 have made possible energy savings of almost 712 ktoe/year, amounting to a reduction in emissions of more than 1.8 million tonnes of CO2. Historically the R&M and Chemicals sector contributed to this result, but since 2014 the E&P sector also has a strong influence by carrying out, in 2016 alone, efficiency and logistics interventions resulting in savings (under full operation) of over 200 ktoe/year, equal to almost 86% of the consolidated Eni datum. In the R&M and Chemicals sector, energy savings (fully operational) of more than 21 ktoe were obtained through the new projects implemented in 2016 at the refineries in Sannazzaro, Livorno, Taranto and Venice and over 5 ktoe through those at Versalis' petrochemical plants. In the G&P sector, EniPower continued to invest in renewable energy and alternative sources and carried out works to improve energy efficiency for savings (under full operation) of over 4 ktoe/year. Fugitive Emissions (- 469321 tCO2eq) - Eni is committed to reducing methane emissions associated with its industrial operations. Most of these refer to uncontrolled emissions from upstream businesses and it is here that efforts have been concentrated. Eni upstream has achieved reductions of over 43ktCH4, equal to 1.1Mt of CO2 eq estimated for the 2015-2016 period compared with 2014, thanks to the start of specific campaigns to identify fugitive methane emissions from plants and related maintenance and leakage elimination (so-called Leak Detection and Repair campaigns - LDAR).
Divestment			
Acquisitions			
Mergers			
Change in output	0.78	Decrease	Absolute Scope 1+2 GHG Emission in 2015 has fallen overall by 3.24% respect to 2015; 2.46% of reduction has been achieved through the implementation of emission reduction activities, 0.78% of reduction is due to change in production level.
Change in methodology			
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
0.000720	metric tonnes CO2e	56693000000	Location-based	26	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 2016 were 56693 million € (ref. Eni Fact Book 2016, page 60). This performance indicator has substantially increased in 2016 respect to 2015, mostly due to the link between Eni revenues and price of oil barrel, which in 2016 decreased of about 17% compared to 2015. Note that KPI for 2015 has been revised according to the new boundary, and the updated value is 0.000574.

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
0.1683	metric tonnes CO2e	Other: tonnes of oil equivalent	122405565	Location-based	8	Decrease	Scope 1+2 - Upstream Key Performance Indicator (GHG emissions/ oil&gas gross operated production), expressed in terms of tCO2 equivalent (20597654) per toe (tonnes of oil equivalent). Figure includes CO2, CH4 and N2O emissions. The reduction respect to 2015 reflects the big effort of Eni for the implementation of specific strategies to reduce greenhouse gas emissions (in particular flaring down activities and methane reduction campaigns) and improvement actions designed to increase energy efficiency. The details of the reduction initiatives are described in question CC12.1a. Note that KPI for 2015 has been converted to toe in order to make it homogenous with Eni institutional reporting; the 2015 reference value is 0.01833 tCO2eq/toe.

Further Information

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

Yes

CC13.1a

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

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union ETS	Fri 01 Jan 2016 - Sat 31 Dec 2016	10818557	9411441	20229998	Facilities we own and 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 CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
Credit purchase	Energy efficiency: own generation	CN4725	CDM (Clean Development Mechanism)	87800	87800	Yes	Compliance
Credit purchase	Energy efficiency: own generation	CN5447	CDM (Clean Development Mechanism)	44024	44024	Yes	Compliance
Credit purchase	Coal mine/bed CH4	CN6928	CDM (Clean Development Mechanism)	31991	31991	Yes	Compliance
Credit purchase	Hydro	CN8300	CDM (Clean Development Mechanism)	622	622	Yes	Compliance
Credit purchase	Hydro	BR9282	CDM (Clean Development Mechanism)	84848	84848	Yes	Compliance
Credit purchase	Energy efficiency: supply side	CN3008	CDM (Clean Development Mechanism)	145656	145656	Yes	Compliance
Credit purchase	Biomass energy	CN3525	CDM (Clean Development Mechanism)	103616	103616	Yes	Compliance
Credit purchase	Coal mine/bed CH4	CN1900	CDM (Clean Development Mechanism)	114238	114238	Yes	Compliance
Credit purchase	Hydro	BR9282	CDM (Clean Development Mechanism)	33841	33841	Yes	Compliance
Credit purchase	Wind	CN7311	CDM (Clean Development Mechanism)	2808	2808	Yes	Compliance
Credit purchase	Hydro	CN5197	CDM (Clean Development Mechanism)	8572	8572	Yes	Compliance

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
Credit purchase	Hydro	CN8300	CDM (Clean Development Mechanism)	24378	24378	Yes	Compliance
Credit purchase	Coal mine/bed CH4	CN6928	CDM (Clean Development Mechanism)	12540	12540	Yes	Compliance
Credit purchase	Hydro	BR9282	CDM (Clean Development Mechanism)	14576	14576	Yes	Compliance
Credit purchase	Energy efficiency: supply side	CN3008	CDM (Clean Development Mechanism)	2226	2226	Yes	Compliance
Credit purchase	Wind	CN7311	CDM (Clean Development Mechanism)	82110	82110	Yes	Compliance
Credit purchase	Other:	CN1891	CDM (Clean Development Mechanism)	2808	2808	Yes	Compliance
Credit purchase	Coal mine/bed CH4	CN1900	CDM (Clean Development Mechanism)	3346	3346	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 and services	Relevant, calculated	1029404	These GHG are the results of EEIO analysis of purchased goods and services (755320) and GHG data collection of O&G drilling contractors (274084), which operated for us in the reporting year. The EEIO analysis is composed by the following stages/steps: 1) procurement data collection and analysis 2) procurement data classification according to UN ISIC ver 3.1 2004 3) calculation of 2016 spending vector 4) the 2016 spending vector is multiplied for the environmental satellite WIOD I/O matrix; 5)the total GHG are splitted proportionally between 2016 spending for goods and services and capital goods. GHG data from drilling contractors are collected because it is closely linked to O&G exploration,that is Eni's 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.	27.00%	Eni has decided to apply EEIO analysis to its purchased goods and services making use of WIOD matrix in accordance with both WBCSD-WRI "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and IPIECA/API Estimating petroleum industry value chain (Scope 3) GHG emissions. On the other hand, GHG from purchased drilling operations quality/accuracy is comparable to scope 1 and scope 2 quality/accuracy. 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" and IPIECA overview of methodologies. It is currently under revision. It includes 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

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
					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. Furthermore, the last year as part of our climate change program we have defined our scope 3 baseline using 2015 activity data. Finally, as one of the results of our current Eni's green procurement project, qualified vendors will be motivated to have verified GHG inventories.
Capital goods	Relevant, calculated	914307	These GHG are the results of EEIO analysis of purchased capital goods in the reporting year. The EEIO analysis is composed by the following stages/steps: 1) procurement data collection and analysis 2) procurement data classification according to UN ISIC ver 3.1 2004 3) calculation of 2016 spending vector 4) the 2016 spending vector is multiplied for the environmental satellite WIOD I/O matrix; 5) the total GHG are splitted proportionally between 2016 spending for goods and services and capital goods.	0.00%	Eni has decided to apply EEIO analysis to its purchased goods and services making use of WIOD matrix in accordance with both WBCSD-WRI "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and IPIECA/API Estimating petroleum industry value chain (Scope 3) GHG emissions. Finally, as one of the results of our current Eni's green procurement project, qualified vendors will be motivated to have verified GHG inventories.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	5857207	This figure refers to GHG emissions from generation of electricity purchased and sold to end users (trading activity). The activity data refer to purchase of electric energy from third party (about 15 TWh). the following hypothesis have been	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
			made: It has been generated in Italy; It encompasses energy generated from either renewable sources or fossil fuels. Average GHG Emissions factors for CO2 published by Italian operator of national electric grid “Terna” and API Compendium 2009 for CH4 and N2O have been used.		
Upstream transportation and distribution	Relevant, calculated	1440998	The figure refers to GHG emissions from road and maritime transportation and distribution of products. According to the Eni 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 In addition, since 2016, in this category are accounted for GHG from transportation of equipment and materials by vessels, services purchased by Eni’s Upstream business line.	100.00%	
Waste generated in operations	Not relevant, calculated	88144	Data on waste generated in Eni operations and disposed by third parties are recorded by Eni as: 1)Waste incinerated - at third party facilities	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
			2)Waste sent to landfill - landfill owned by third party 3)Waste sent to chemical/physical/biologic treatment - externally 4)Waste sent to other treatment - externally 5)Waste reused/recycled - at third party facilities. The quantity of each waste disposal type is the activity data. GHG emission factors on Waste Disposal of Industrial Waste are derived from DEFRA, 2016 Government GHG Conversion Factors for Company Reporting.		
Business travel	Not relevant, calculated	41009	Business trips travelled by plane, car or train recorded by Eni's Business Travel Management Unit have been analysed in different ways: Trip distances by plane are broken down: Trip Distance Long d > 1.126 km Medium 483 <d <1,126 km Short d< 483 km Distances travelled by train are achieved using departure and destination railway stations and official national railway company data. Trips by car already have data on distances. Finally, in order to avoid double counting with category n.11, GHG emissions from trips by plane and by cars are recalculated deducting transportation fuel market quota sold for planes and cars by Eni: Eni's market share of transportation fuel: plane: 27,5 % car: 24,5% 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

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
Employee commuting	Not relevant, calculated	359936	The estimation method has been set up on the following assumptions: • Every employee drive an average daily trip of 30 km (two ways), with a city car and typical city traffic • Every employee work 220 days/year These information allow to get the activity data (kilometers driven by all Eni's employees in one year). In addition, since 2016, in this category are accounted for the GHG from onshore/offshore trips of Eni employees and its contractors by helicopter and by vehicles, recorded by Eni's Upstream business line. Regarding the emission factors, Eni refers to US-EPA Climate Leaders/ Optional Emissions from Commuting, Business Travel and Product Transport, may 2008.	0.00%	Several actions are in place with the purpose to reduce these emissions : the main 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 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 industry. Eni reports GHG emissions with the operational control approach, whenever an asset leased by Eni fall within its operational boundary, their GHG emissions are accounted for as Scope 1 and those from electric or other energy consumptions as Scope 2 emissions. This category is not expected to be material, according also with the recent IPIECA/API overview of methodologies for estimating Scope 3 emissions from O&G Industry

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Downstream transportation and distribution	Not relevant, explanation provided				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. However, this category is not expected to be material, according also with the recent IPIECA/API overview of methodologies for estimating Scope 3 emissions from O&G Industry. Most of Eni's products are fuels, so when sold to final customer they are not transported or distributed.
Processing of sold products	Relevant, calculated	10614787	GHG emissions from processing carried out by third parties of Eni's sold products are the results of natural gas, LNG and crude oil sold to third parties considering they are processed with the same technologies as those currently used by Eni. GHG Emissions factors are found in: SGI-IC "Methane and CO2 emissions from the natural gas supply chain", limited to Transmission, Storage and	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
			Distribution stages; and Exergia Consultancy "Study on actual GHG data for diesel, petrol, kerosene and natural gas".		
Use of sold products	Relevant, calculated	225619708	GHG emissions from use of Eni's sold products are estimated as all sold products would be sold and burned in 2016. In order to set the activity data, IPIECA/API "net volume accounting" method has beed used, considering the upstream production as the most representative point of the value chain. The IEA refining conversion rates from the standard oil barrel have been used in order to calculate final products rates. GHG emissions are estimated by multiplying the amount of single oil products (derived from crude oil) and natural gas, by the relevant average emission factors, using the same recognized for EU Emission Trading Scheme Regulation.	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 retail sales (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 220 million tonnes CO2eq.
End of life treatment of sold products	Relevant, calculated	173541	Eni's sold products whose end of life GHG emissions are estimated are: Lubricants and asphalts and chemicals sold by Eni, handled as they would be plastics products. The basic hypothesis is about the type of end of life. Activity data for this category has been estimated using this information and the Eni's sold products figures. GHG emissions factors are got from databases by Ecometrica and from Sustainability report of Italian National service for collection of exhausted lubricants	100.00%	Regarding lubricants, the collection exhausted lubricants is managed by a national service 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.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Downstream leased assets	Not relevant, explanation provided				Eni doesn't account Scope 3 emissions related to facilities and buildings not owned and not operated by Eni. The reasons is that, besides the data difficult to retrieve, Eni cannot control the emissions and hasn't the opportunity to implement reduction project, so this source should be assumed as not relevant. 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	245741	GHG emissions from Eni’s fuel stations in Italy and across Europe comes mainly from electric energy consumption rates [kWh/year]. This amount has been calculated using the total number of Eni’s fuel stations and a yearly average electric energy consumption by a fuel station of ordinary size (with n.4 fuels dispenser and n.2 car washing). Note that the methodology used differs from the one used in 2015, resulting in a strong increase of emissions from this category.	100.00%	
Investments	Not relevant, calculated	46592	As activity data of this method is the financial data of investments made in 2016 by Eni. In order to get GHG emissions companies have been classified	97.00%	This figure is only partial and doesn't include joint ventures where Eni is not operator. This category is not included in

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
			according to UN ISIC v3.1 2004 categories and the total amount of GHG has been got from 2016 revenues (retrieved only for two out of 12 investments but equal to 97% of total investments) and environmental satellite matrix WIOD. Then GHG proportional to Eni ‘s share have been calculated.		Eni's scope 3 emissions external limited assurance.
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	Limited assurance	https://www.cdp.net/sites/2017/34/5634/Climate Change 2017/Shared Documents/Attachments/CC14.2a/ISAE3410_ENI_GHG_INVENTORY_2016.pdf	Pages 1,2,3 and 25	ISAE 3410	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
Upstream transportation & distribution	Change in boundary	23	Increase	Boundary includes now logistic purchased by Eni Upstream

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Emissions reduction activities	13	Decrease	Eni reduced GHG emissions from business travel, increasing the use of videoconference systems
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Emissions reduction activities	0.93	Decrease	Since 1st April 2016 Eni has purchased 1322687 Guarantees of Origin. By 31st March 2017, 1306053 of these were annulled for Eni's customers. Respect to 2015 (when 1174279 Mwh were annulled for Eni's Customers), this year additionally 131774 Mwh were annulled for Eni's customers; the last figure corresponds to about 55684 tCO2eq of Scope 3 emissions, that can be considered as avoided Scope 3 emissions related to electricity trading activities. The reduction percentage of 0.93% is the results of the ratio: 55684/ 5996355
Use of sold products	Change in output	5	Decrease	The decrease in 2016 is due to the decrease of crude oil and natural gas equity production
Purchased goods & services	Change in methodology	168	Increase	The new methodology include also EEIO analysis of purchased goods and services other than drilling activities (reported until 2015)
Use of sold products	Emissions reduction activities	0.34	Decrease	The increase of natural gas in 2016 upstream equity production portfolio (compared to 2015) versus oil, prevents 772413 tCO2e.

CC14.4

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

Yes, our suppliers

CC14.4a

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

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

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Compliance	5000	100%	In 2016, 10041 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 application (pre-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). Note that number of supplier involved is 10041 and not 5000 as reported in column "Numbers of suppliers". The ORS doesn't allow to put a number greater than 5000.

CC14.4c

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

Note for CC14.1 and CC14.3a: some categories have been estimated and reported in CDP for the first time in 2016. For those categories, 2015 and 2014 figures have been recalculated but in question CC14.3a the comparison regards only categories previously reported in CDP 2015 CC14.4: regarding Enis' engagement with customers: Eni has in place continuous relations with consumer associations in order to build a relationship based on transparency and trust through dialogue, cooperation and problem solving. Over the years, the company’s focus has been on improving our relationship with consumers, consequently we have moved from a customer-oriented to a consumer-oriented model, constantly promoting interactive projects at the national and local level. The strategy of engagement is based on the promotion of low carbon features of Eni’s products, as well as the promotion of a sustainable and responsible use of energy. In particular, Eni’s retail business (Eni Gas & Luce SpA) engages with residential customers through specific questionnaires to promote potential actions and behaviours able to reduce the energy consumptions. Another relevant example of engagement with our customers is “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. CC14.4:Regarding Eni's engagement with suppliers: 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 check-list. 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 2017, Eni has launched 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.

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
Claudio Granata	Chief Services and Stakeholder Relations Officer	Chief Operating Officer (COO)