

# Welcome to your CDP Climate Change Questionnaire 2020

## C0. Introduction

### C0.1

#### **(C0.1) Give a general description and introduction to your organization.**

**Eni is an integrated company that operates across the entire energy chain in 66 Countries around the world and employing more than 31,300 people.**

In September 2019 Eni has announced a new mission, outlining the path that the company is taking to face the main challenge of the energy sector: ensuring access to efficient and sustainable energy for all, while reducing greenhouse gas emissions, in order to combat climate change in line with the objectives of the Paris Agreement. This mission completes and consolidates Eni's commitment to an energy transition that is also socially just and organically integrating the 17 SDGs to which Eni intends to contribute, while seizing new business opportunities.

**In February 2020 Eni has announced its new Long-Term Strategic Plan to 2050, that combines objectives of continuous growth in a fast developing energy market with a significant reduction of the Group's carbon footprint.** In the future, Eni will be even more sustainable, it will have a stronger role as a global player in the energy scenario and will benefit from the progressive development of business areas such as renewables, biofuels, circular economy. The evolution of the business portfolio will have a significant impact on carbon footprint reduction, as highlighted in the new GHG reduction targets announced during Eni's Strategy presentation: obtain an 80% reduction by 2050 in net emissions, referable to the whole life cycle of the energy products sold by 2050, including Scope 1, 2 and 3 emissions and a 55% reduction in emissions intensity compared to 2018. In this occasion, Eni has also confirmed and further extended the intermediate targets to reach net zero direct (Scope 1) and indirect (Scope 2) emissions by 2030 for the upstream activities, and on overall Eni's operations by 2040. These targets are referred to both operated and non-operated activities, on an equity basis.

**In June 2020 Eni's Board of Directors has approved a new business structure for the company,** creating two new business groups: *Natural Resources*, to develop the upstream oil & gas portfolio sustainably, promoting energy efficiency and carbon capture; *Energy Evolution*, dedicated to supporting the evolution of the company's power generation, product transformation and marketing from fossil to bio, blue and green. The new organization is a milestone towards the implementation of Eni's strategy to 2050, which combines value creation, portfolio sustainability and financial strength.

**In July 2020 Eni has updated its short- and medium-term strategy to face the effects of the pandemic on the energy sector,** in terms of market volatility and the significant reduction in commodity prices. All the other 2023 targets related to the energy transition businesses have been confirmed. Moreover, additional investments of € 800 million in 2022 and 2023 have been allocated to the businesses involved in the energy transition, in particular bio-refining, renewables and retail customer segment.

## C0.2

**(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2019	December 31, 2019	No

## C0.3

**(C0.3) Select the countries/areas for which you will be supplying data.**

Algeria  
 Angola  
 Argentina  
 Australia  
 Austria  
 Bahrain  
 Belgium  
 Canada  
 China  
 Congo  
 Côte d'Ivoire  
 Cyprus  
 Czechia  
 Democratic People's Republic of Korea  
 Denmark  
 Ecuador  
 Egypt  
 France  
 Gabon  
 Germany  
 Ghana  
 Greece  
 Greenland  
 Hungary  
 India  
 Indonesia  
 Iraq  
 Ireland  
 Italy  
 Japan  
 Kazakhstan  
 Kenya  
 Lebanon  
 Libya  
 Luxembourg

Mexico  
Montenegro  
Morocco  
Mozambique  
Myanmar  
Netherlands  
Nigeria  
Norway  
Oman  
Pakistan  
Poland  
Romania  
Russian Federation  
Saudi Arabia  
Singapore  
Slovakia  
Slovenia  
South Africa  
Spain  
Sweden  
Switzerland  
Taiwan, Greater China  
Timor-Leste  
Tunisia  
Turkey  
Turkmenistan  
United Arab Emirates  
United Kingdom of Great Britain and Northern Ireland  
United States of America  
Venezuela (Bolivarian Republic of)  
Viet Nam

## C0.4

**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

USD

## C0.5

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

Other, please specify

Operational control for scope 1 and scope 2 GHG emissions and for energy figures (section 8); equity share for long term targets and financial figures; mixed approach for scope 3 categories, as described in Eni GHG Verification Statement.

## C-EU0.7

**(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.**

Row 1

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**Electric utilities value chain**

Electricity generation  
Distribution

**Other divisions**

Gas storage, transmission and distribution  
Gas extraction and production

## C-OG0.7

**(C-OG0.7) Which part of the oil and gas value chain and other areas does your organization operate in?**

Row 1

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**Oil and gas value chain**

Upstream  
Midstream  
Downstream  
Chemicals

**Other divisions**

Biofuels  
Grid electricity supply from gas  
Grid electricity supply from renewables  
Carbon capture and storage/utilization

## C1. Governance

### C1.1

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

### C1.1a

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	<p>The CEO is identified as the Director in charge of establishing and maintaining an effective internal control and risk management system. The CEO is responsible for identifying the main corporate risks, including the risks connected with climate change, guides the strategies and monitors their progress. Each year the CEO assigns the guidelines for defining the strategic plan related to the progress towards carbon neutrality for each business line and for the support functions.</p> <p>In 2019 the CEO defined and announced a target for the Upstream Sector to become Carbon Neutral by 2030. In 2020, during Eni's Strategy Presentation, the CEO announced Eni new long term decarbonization path, setting out the operational strategies and objectives for 2035 and 2050 defining reduction targets for net scope 1, 2 and 3 emissions and net carbon intensity based on a lifecycle approach, while confirming and expanding the net-carbon footprint target on Upstream scope 1 emissions, to Scope 2 emissions by 2030 and all Eni's business by 2040.</p> <p>The CEO brings constantly the attention of Eni's employees to the Company's results in terms of carbon footprint reduction and in particular on the actions needed to implement the decarbonization strategy.</p>
Board-level committee	<p>The Sustainability and Scenarios Committee (SSC) provides recommendations and advice to the Board of Directors on scenarios and sustainability issues, meaning the processes, initiatives and activities surrounding the Company's commitment to sustainable development along the entire value chain, addressing the integration among strategy, evolution scenarios and business sustainability over the medium to long term and examining the scenario for the strategic plan preparation. Set up in 2014, the SSC was the first example, in the Oil and Gas sector, of an integrated approach in the evaluation of sustainability and energy scenarios.</p> <p>In 2019, the SSC met 10 times. During these meetings, the Committee discussed the following macro-themes:</p> <ul style="list-style-type: none"> <li>• Macroeconomic and energy scenario (trend and forecast of the main indicators);</li> <li>• Eni's medium-long term plan;</li> <li>• Climate change and main trends after COP-21 and actions of the signatory Countries related to the targets;</li> <li>• Evolution and perspectives of low carbon technologies (e.g. renewables, circular economy);</li> <li>• Evolution of the Eni's net carbon footprint (scope 1,2,3) and comparison with peers;</li> <li>• Impact analysis on the Eni's Oil &amp; Gas reserves with different price scenarios for hydrocarbons and CO2</li> <li>• Sustainability 's policies and reporting of Eni</li> </ul>
Board-level committee	<p>The Remuneration Committee proposes to the Board of Directors the general criteria for the annual incentive of the CEO and managers with strategic</p>

	<p>responsibilities, which include specific objectives associated with the reduction of GHG emissions.</p> <p>In 2019 the Committee met 10 times and defined the proposal for the new 2020-2022 Long-Term Incentive Plan, with performance metrics characterized by a significant focus on environmental sustainability and energy transition (overall weight 35%), with targets linked to reduction of GHG emissions and to energy transition for the CEO and managers with strategic responsibilities.</p>
Other, please specify Advisory Board	<p>From 2017 to 13 May 2020, for a broader view of the factors affecting the value creation of the Company in the long term, the Board of Directors has set up an Advisory Board, made up of a number of international experts, which in 2019 focused on analysing the main geopolitical, technological and market trends, including issues related to the decarbonisation process. In the period from 2017 to 2020, the Advisory Board met 7 times, focusing its attention on issues with the greatest impact on Eni's business and the energy sector. With regard to the energy transition, the Advisory Board discussed the opportunities and challenges arising from the transformation of the current energy mix and the concomitant need to deliver more energy to meet the demand of Countries pursuing their development. The Advisory Board analysed the technological levers available for activation, giving due consideration to their rapid and efficient application and the great role that CO2 capture can play in a variety of ways, including through the development of projects for forest conservation.</p> <p>The contribution of the Advisors, which is intended to identify a pragmatic approach to the transition, helped to define the corporate decarbonisation strategy unveiled at the Strategy Presentation in February 2020.</p>

## C1.1b

### (C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	<ul style="list-style-type: none"> <li>Reviewing and guiding strategy</li> <li>Reviewing and guiding major plans of action</li> <li>Reviewing and guiding risk management policies</li> <li>Reviewing and guiding annual budgets</li> <li>Reviewing and guiding business plans</li> <li>Setting performance objectives</li> </ul>	<p>The Board of Directors (BoD) plays a central role in managing the main aspects linked to climate change. In particular, on the proposal of the Chief Executive Officer, the Board of Directors examines and/or approves:</p> <ul style="list-style-type: none"> <li>- goals related to climate change and energy transition, as an integral part of business strategies;</li> <li>- the portfolio of Eni's top risks, including climate change;</li> <li>- Eni's medium-long term plan, aiming to guarantee the sustainability of the business portfolio over a thirty-year period, in line with</li> </ul>

	<p>Monitoring implementation and performance of objectives</p> <p>Overseeing major capital expenditures, acquisitions and divestitures</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>what is provided for in the Four-Year Strategic Plan;</p> <ul style="list-style-type: none"> <li>- the Short-Term Incentive Plan and the proposal for the Long-Term Equity Incentive Plan with targets linked to reduction of GHG emissions and to energy transition for the CEO and managers with strategic responsibilities;</li> <li>- annual sustainability results, such as the sustainability report (Eni for) and the HSE review, including climate change mitigation contribution performances;</li> <li>- institutional reporting, which includes the Interim Consolidated Report and the Annual Financial Report (including the Consolidated Disclosure of Non-Financial information);</li> <li>- the relevant projects and their progress, on a half-year basis, with sensitivity to Eni and IEA SDS carbon pricing;</li> <li>- resilience tests on all upstream cash generating units (CGUs) applying the IEA SDS scenario;</li> <li>- strategic agreements, including climate change-related initiatives.</li> </ul> <p>Moreover, since 2018, Eni's BoD contributes to the "Climate Governance" initiative of the World Economic Forum (WEF), aimed at developing guiding principles for effective climate governance on corporate boards.</p>
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## C1.2

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify Evaluation for Medium and Long Term Plans Committee	Both assessing and managing climate-related risks and opportunities	As important matters arise
Other, please specify SPLT- Scenarios, Positioning and Medium-Long Term Plan	Both assessing and managing climate-related risks and opportunities	As important matters arise

Other, please specify CCS – Climate Change Strategies and Positioning	Both assessing and managing climate-related risks and opportunities	As important matters arise
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## C1.2a

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

**Eni's CEO is a member of the Board of Directors and he is directly responsible for identifying the main business risks, including risks related to climate change, directing strategies and assessing and monitoring their progress.** The duties of overseeing the internal control and risk management system, including risks related to climate change, have been appointed to the CEO by the Board of Directors, in order to strengthen the internal control system even further. Each year the CEO assigns the guidelines for setting out the strategies provided for in the Strategic Plan on the path to decarbonization to the Business Lines and support functions. Both CEO's Short Term Incentive Plans and Long-Term Incentive Plans include objectives associated with climate strategy that are consistent with the guidelines defined in the Strategic Plan. During the strategic plan presentations to the financial community, the CEO is giving a progressively strong emphasis to the decarbonization path of the Company, confirming Eni's commitment on climate change. Moreover, Eni's CEO is the Chair of the **Evaluation for Medium and Long Term Plans Committee**.

**The Evaluation for Medium and Long Term Plans Committee was set up in 2019 with the aim of supporting the organic and sustainable development of Eni's business, identifying strategic and operative guidelines and guiding the actions to ensure that the targets related to decarbonisation are met.** The Committee has the task of:

- analysing and evaluating proposals for medium/long-term alternative plans;
- identifying operational development guidelines;
- directing any actions to ensure convergence between the strategic plan and the medium/long-term plan.

The Committee is presided over by the CEO of Eni and has the same composition as the Management Committee: composed by the CFO, the two general directors, and all other directors. Furthermore, other persons may also be invited to attend where their duties relate to items on the agenda. The secretarial activity of the Committee is ensured by the **Head of Scenarios, Positioning and Medium to Long-term Plan (SPLT)**.

The **Scenarios, Positioning and Medium to Long-term Plan (SPLT)** central organisational function was formed in 2019 under the Chief Financial Officer, to superintend the processing and consolidation of the medium to long-term plan and guarantees the processing of the hypotheses for configuration of the energy sources portfolio for achieving the goals stated in the plan, including those related to ESG. The structures within this function, cover the thematic areas of Energy Scenarios, Long-term planning and Climate Change. Within this function, the **Climate Change Strategy and Positioning** unit coordinates the process for defining Eni's climate strategy, development and monitoring of the portfolio of initiatives in line with the international agreements on climate. Within this function, three departments cover the areas of



Climate Policy, Climate Disclosure and Risk Mitigation, GHG management, and other climate related issues such as Adaptation, Biodiversity and Water Stress.

## C1.3

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

### C1.3a

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	<p>The CEO's Short-Term Incentive Plan (STI) includes objectives associated with climate strategy that are consistent with the guidelines defined in the Strategic Plan. Under the Short-Term Incentive Plan, a portion of the bonus matured is deferred over a three-year period, subject to further performance conditions, in order to assess sustainability over the medium term. In particular, 25% of the STI is composed by environmental sustainability and human capital objective, half of this refers to reducing the GHG emissions intensity rate of operated hydrocarbon production, in line with the 2025 target announced to the market. This target is assigned to the CEO with a weight of 12.5% and to all of the Eni management population with responsibilities related to meeting the carbon neutrality strategy targets.</p> <p>In addition, the new share-based 2020-2023 Long-Term Incentive Plan provides for the introduction of absolute targets specifically related to the decarbonisation process and the energy transition, also in response to the significant interest expressed by investors for sustainability and environmental issues. The Long-Term Incentive Plan supports the implementation of the Strategic Plan by introducing new parameters related to the decarbonisation, energy transition and circular economy targets, in line with the goals communicated to the market. The total weight of these targets is</p>

			equivalent to 35% both for the CEO and for all the Eni management involved in the Plan.
Management group	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Efficiency target	In coherence with CEO annual objectives, 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. Also the Long-Term Share Incentive Plan applies to Managers with strategic responsibilities, in coherence with CEO objectives.

## C2. Risks and opportunities

### C2.1

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

#### C2.1a

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	0	4	The short-term horizon is used to set decarbonization objectives in accordance with Eni's 4-year strategic plan, which is updated on a rolling basis each year.
Medium-term	5	15	The medium-term horizon is used to set decarbonization objectives and targets in accordance with Eni pathway to decarbonization and in line with business ambitions.
Long-term	16	30	The long-term horizon is used to define the future evolutions of energy business and to drive the company performances in line with low carbon trajectories. Indeed, Eni's Long Term Plan aims to guarantee the sustainability of the business portfolio to 2050, over a thirty-year period and in line with the Four-Year Strategic Plan.

#### C2.1b

**(C2.1b) How does your organization define substantive financial or strategic impact on your business?**

Eni's Integrated Risk Management (IRM) framework is largely based on COSO ERM Framework (Committee of Sponsoring Organizations of the Treadway Commission, Enterprise Risk Management). Within Eni IRM framework, a risk scoring model has been adopted to assess severity of risks identified according to the 4-y strategic plan objectives and in coherence with risk management practices applied at different business areas (HSE, finance, etc); as to climate related risks and opportunities, relevant assessment include also reference to Eni long term strategy.

**The risk impact value is assessed based on a 5-level rating scale: 1-negligible, 2-significant, 3-relevant, 4-very relevant, 5- extreme, and it is measured based on several quantitative and qualitative metrics, which are subject to yearly review in order to be harmonized with the 4-y strategic plan:**

- Economic-financial metric: the impact is measured based on reduction of net profit or cash flow. For such a metric, severity thresholds (from negligible to extreme) are set up based on the assumptions underlying the 4-y strategic plan.
- Descriptive-qualitative metric: the impact is measured based on the effort of the top management to manage the risk - it may involve a potential review of strategy.
- Operational metric: the impact is measured based on reduction in daily production or delayed production.
- Image & reputation metric: the impact is measured based on the duration of the negative impact upon selected stakeholders.
- Environmental metric: the impact is measured based on the fallouts on the environment and ecosystem.
- Health & safety metric: the impact is measured based on the effects on the health of both Eni and third parties' personnel, or any other individual concerned.
- Social metric: the impact is measured based on any social damage to local communities and population adjacent to industrial plants.

**In order to assess the overall magnitude of the risk, impact is combined with probability/frequency, that is apportioned over a 5-level rating scale: 1- rare, 2- unlikely, 3- moderate, 4- possible, 5- likely.** The resulting risk score (probability x impact) is plotted in a probability/impact matrix in which each risk is displayed at both inherent and residual level; the length of the line drawn between the two scores shows how effective the mitigations in place are.

**All risks that have a risk score of 8 or higher, at the residual level, are considered as "substantive" i.e. "top" risk, and, as such, treated differently and monitored/assessed on a quarterly basis.** Based on what above, a substantive financial impact occurs when a risk scores 8 or above (residual level) with the higher impact registered on the economic-financial metric (that means, plotted the risk in the matrix, at least a "significant" economic-financial impact with reference to a risk event classified as "possible").

A strategic impact occurs, in general terms, whenever an impact is registered such that the strategy is modified. However, by adopting the qualitative-descriptive metric that includes strategy modifications at level 4 and 5 of the impact metric, a substantive strategic impact will occur for risks scoring 8 or higher (residual level) in connection to a "very relevant" or "extreme" qualitative-descriptive impact. Lastly, a substantive change according to IRM methodology occurs when the residual, score of a selected risk escalates up to 8 or higher in Eni probability/impact matrix, compared to the previous assessment or when a "top" risk escalates from the so called "tier 2" area to "tier 1" area of the matrix, the latter being associated to the most severe risks.

**Climate-related risks have scored 25 at inherent level in latest annual risk assessment, based on top scores in both probability and impact registered on the qualitative/descriptive metric and that largely due to the adoption of Eni long term decarbonization strategy, its inclusion in the 4-y strategic plan and its all-pervasive effect on Eni business model and organization. At the residual level, the risk has always been assessed as a “top” risk, however in 2020 it registered a substantive change as above defined.** The process to identify and assess the risk is carried out at a global, i.e. aggregated, level, at business lines level as well as at specific project level.

Quantifiable indicators upon which climate-related risks are regularly monitored include carbon emissions thresholds and targets which are directly used to set the trend of risk and indirectly, i.e. in combination with price assumptions and connected strategic targets, determine economic/financial impact.

**The current threshold used for a “significant” financial impact in relation to an event with a likelihood of occurrence classified as “possible”, determines a net profit or Cash flow reduction that would lie above US\$ 110 million.**

## C2.2

**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

### **Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

### **Risk management process**

Integrated into multi-disciplinary company-wide risk management process

### **Frequency of assessment**

More than once a year

### **Time horizon(s) covered**

Short-term  
Medium-term  
Long-term

### **Description of process**

The process for identifying and assessing climate-related risks and opportunities is part of Eni's Integrated Risk Management (IRM) Model, which is developed to ensure that management takes risk-informed decisions, taking into account current and potential future risks, including medium and long-term ones, in the frame of an integrated and comprehensive approach.

The IRM model is an integral part of the Internal Control and Risk Management System of Eni, that 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.

“Climate change” risk is one of Eni’s top strategic risks and it is analysed, assessed and monitored by the CEO as part of the IRM process. The climate-related risks and opportunities analysis is carried out using an integrated and cross-cutting approach which involves specialist departments (i.e. Long-Term Strategy, HSE, Investor Relations, R&D, Planning & Control, Sustainability, IRM) and business lines, and considers the 5 drivers related to energy transition (market scenario, regulatory and legal aspects, technological developments, reputational issues) and physical aspects (extreme/chronic weather and climate phenomena), as recommended by the Task Force on Climate-related Financial Disclosure (TCFD) of the Financial Stability Board. The process is carried out at a global aggregated level, at business lines level as well as at a specific project level.

Risk identification and assessment is carried out by adopting metrics that take into account potential quantitative impacts (i.e. economic, financial or operational) and the potential qualitative impacts (i.e. on the environment, health and safety, social, reputation) and whose thresholds may vary based on the level of analysis, i.e. business level or corporate level.

As to the process for managing risks and opportunities connected to strategy objectives, IRM model takes a top-down and risk-based approach which is applied, in the first instance, to the definition of Eni’s Strategic Plan (risk strategy) in order to identify specific de-risking objectives and strategic treatment actions and analyse the underlying risk profile of the Plan, also performing, to such end, stress tests for economic-financial resiliency vs strategic targets.

These activities are performed coherently and integrated with the strategic planning process and support the Board’s assessments regarding the acceptability of the risk profile of the strategic plan subject to his attention. The process continues with the periodic cycles of risk assessment & treatment and monitoring, the risk profile analysis of major transactions, as well as integrated analysis of risks assessed jointly with certain business and/ or functions.

During 2019:

- the Annual Risk Profile Assessment was carried out in the first half of the year and the Interim Top Risk Assessment in the second half.
- approximately 160 risks were identified, of which 20 top risks, grouped into strategic, external and operational risks;
- three monitoring cycles were performed on the top risks (including “Climate change”) in order to analyse the risks trends and the implementation status of treatment actions put in place;
- specific de-risking objectives were identified with reference to the main risks, including climate-related risks and were then, formalized in the 2020-2023 Guidelines issued by the CEO at the beginning of the Strategic Planning process.

As above explained, IRM process is integrated in the strategy definition and is designed to respond and adjust itself promptly to the modifications to the overall risk profile of the company. With reference to climate related risks and opportunities, Eni refers to the International Energy Agency (IEA) World Energy Outlook scenarios, in particular the Sustainable Development Scenario, which is used to identify and assess potential emerging risks and opportunities associated with changes in energy market and to define mitigation actions to be integrated in the Eni decarbonization strategy.

During the risk monitoring cycle of February 2020, the task was therefore to promptly

and adequately embed in the company risk profile the impacts of risk-sensitive modifications already made to company mission and being made to long term strategic objectives.

What above implied a broad re-assessment of climate related risks which combined short to medium term targets and long terms objectives applied to Eni operations/business lines. The five TCFD drivers were broken down and specific opportunities found e.g. on regulation, scenario (new market opportunities, sustainable finance) and technological aspects of selected businesses/initiatives and physical risks envisaged for productive assets (e.g. Gulf of Mexico) and exploration assets (e.g. Vietnam concessions) - for which IRM continues to build up tools of analyses via a dedicated function within the Industrial Risk Management.

“Climate change/Energy Transition” moved accordingly to a 25 inherent score - highest score registrable in IRM probability/impact matrix (in connection with an event “probable” and “extreme”) - having factored in the company long term strategic objectives as well as locked in the business short-medium term objectives.

This kind of analysis allows Eni to plan mitigation actions such as the adoption of additional technical measures to protect wells, plants and structures in areas most exposed to extreme events and the introduction of more stringent design and control criteria for new projects, which consider the effects of climate change scenarios. With reference to physical risks, Eni’s current asset portfolio has a geographical distribution that does not result in high risks concentrations. The most vulnerable area for Eni is the Gulf of Mexico, where the company holds interests in 82 exploration and production blocks, and therefore assessed the potential economic exposure in terms of damages to assets and loss of production and identified mitigation actions. The analysis shows a marginal increase in the exposure of both risk to asset (covered by specific insurance) and business interruption (average of 107 kboe/y lost for hurricanes). In the worst-case scenario (total loss of the platform at highest risk) the maximum potential financial impact is US\$ 450 million, which becomes US\$ 300 million net of the insurance coverage.

In terms of transition opportunities, IEA SDS Scenario is taken as a reference. In this scenario natural gas becomes by 2040 the first “single” source in the energy mix. Eni is a major player in the natural gas value chain and provides energy to local markets. In 2019 over 73% of the total gas sold was produced for local markets, reaching 100% in 12 Countries. In the 2020-2023 plan, 48% of overall upstream investments are addressed to gas projects. equal to US\$ 12 billion.

## C2.2a

**(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?**

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Eni is present in 66 Countries around the world with upstream and mid-downstream activities. Current or future regulations related to climate change in these Countries could have an impact on the business, such as:

		<ul style="list-style-type: none"> <li>- Increase in operating and investment costs;</li> <li>- Declining demand for oil products.</li> </ul> <p>Currently about 50% of Eni’s direct emissions is already subject to carbon pricing schemes, mainly the European Emission Trading Scheme, which covers all the major plants in the mid-downstream businesses.</p> <p>As an example, the new European Green Deal sets out the goal for Europe’s economy and society to become climate-neutral by 2050. This goal, which is expected to be wrote into law by 2020, will imply more ambitious EU GHG reduction targets for 2030, therefore the EU-ETS allowances supply will be further reduced, pushing the prices up. Eni’s installations located in Europe could face the risk of a loss of competitiveness on international scale, towards competitors located outside EU, which will not be borne at the same level of environmental cost. In 2019 Eni purchased on the European carbon market about 12 million emissions permits - European Union Allowances (EUAs) with cost of around US\$ 330 million.</p> <p>Current regulation risks and opportunities are internally analysed, assessed and managed through the Eni’s Integrated Risk Management process, which analysis all the climate-related drivers formalized by TCFD.</p>
<p>Emerging regulation</p>	<p>Relevant, always included</p>	<p>Eni is present in 66 Countries around the world with upstream and mid-downstream activities. Current or future regulations related to climate change in these Countries could have an impact on the business, such as:</p> <ul style="list-style-type: none"> <li>- Increase in operating and investment costs;</li> <li>- Declining demand for oil products.</li> </ul> <p>Currently, about 50% of Eni’s direct emissions is already subject to carbon pricing schemes, mainly the European Emission Trading Scheme which covers all the company’s major plants in the mid-downstream businesses. In the forthcoming years additional countries could progressively apply a carbon price on GHG Scope 1 emissions that may imply an increase in operational cost of Oil and Gas operations. Countries relevant for Eni in this respect could be Australia, Mexico or China, where, although carbon regulations of some form are already in place, the scenario is evolving, and we envisage a possible strengthening of the regulatory framework on carbon tax.</p> <p>Emerging regulation risks and opportunities are internally analysed, assessed and managed through the Eni’s Integrated Risk Management process, which analysis all the climate-related drivers formalized by TCFD.</p>

Technology	Relevant, always included	<p>The global need of a low carbon energy system will favor technologies for GHG emissions capture and reduction, production of hydrogen from methane and technologies that support methane emissions control along the Oil &amp; Gas production chain. Moreover, low and zero carbon technological developments in the field of production and storage of energy from renewable sources could have impacts on the demand for hydrocarbons and therefore on Eni traditional businesses. Further technological advances and significant infrastructure investments are needed to support these trends and to make low-carbon technologies truly competitive.</p> <p>Eni is currently working on a wide range of low carbon technologies focusing on three main drivers: carbon neutrality, which includes new advanced systems for conversion of renewable energies like solar and wave power and transformation of CO<sub>2</sub> into useful products, circular economy and operating excellence. Consequently, the technology risk for Eni could be associated to the potential failure and subsequent lack of deployment of a given low carbon technology, together with the loss of resources spent.</p> <p>In this field, Eni is both developing proprietary technologies, while pursuing international collaborations.</p> <p>With regards to proprietary technologies, Eni is developing innovative technologies in the area of production of energy from renewable sources, that can be easily integrated into upstream and downstream activities, in particular the latest generation of solar systems, based both on concentrated solar power (CSP), and on organic photovoltaic (OPV).</p> <p>As per international partnerships, Eni continues the international cooperation with the Massachusetts Institute of Technology and Commonwealth Fusion Systems by investing in the industrial development of technologies for the production of energy by magnetic confinement fusion.</p> <p>Moreover, in January 2020, Eni and ENEA signed an agreement for a large scientific-technological pole on DTT (Divertor Tokamak Test) fusion, to be set up at the ENEA Research Centre by a company in which Eni will hold a 25% share.</p> <p>The estimated tangible value generated by applying innovative technologies developed both in-house and with third parties, in 2019 was US\$ 1.265 million.</p> <p>Low carbon technology risks and opportunities are internally analysed, assessed and managed within the Eni's Integrated Risk Management process, which includes all the climate-related drivers formalized by TCFD.</p>
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Legal	Relevant, always included	<p>The legal risks of climate change are included in the process of integrated risk assessment and managed by Eni Legal Department through dedicated analysis, as recommended by TCFD.</p> <p>On a legal perspective, for Oil &amp; Gas companies the climate change draws the risk of being involved in contentious matters. Currently there is a worldwide trend of lawsuits filed by public and private entities seeking to hold Oil &amp; Gas companies liable for costs associated with climate issues.</p> <p>Eni, along with other major oil companies, is involved in some proceedings currently ongoing in California. In particular, in 2017 and 2018, some local government authorities and a fishing association filed in the courts of the State of California seven proceedings against Eni S.p.A., Eni Oil and Gas Inc. and other Oil &amp; Gas companies, claiming compensation for the damages attributable to the increase in sea level and temperature, as well as to the hydro-geological instability. The cases have been transferred, from the State Courts to the Federal Courts upon the defendants' request alleging the lack of jurisdiction of the State Courts. Further to a suspension period pending the decision regarding jurisdiction, on 26th May 2020 the proceedings have been remanded to the state courts. On 9th July 2020, Eni Oil &amp; Gas Inc. filed, along with other co-defendants, a petition for rehearing en banc to seek for a review of the remand decision. The proceedings will remain suspended until the decision on said petition.</p>
Market	Relevant, always included	<p>As an integrated energy company, Eni refers to the IEA's Sustainable Development Scenario (SDS) to analyse the energy transition market's risks and opportunities. SDS Scenario is considered the most challenging for the path to decarbonization, since it is a "predefined objective" scenario which aims to contain emissions well below 2 °C in line with the objectives of the Paris Agreement.</p> <p>In the SDS scenario fossil fuels are expected to retain a central role in the energy mix, although the global energy demand by 2040 is expected to drop as compared to its present level (-7.2% vs. 2018, CAGR 2018-2040 -0.3%). Natural gas is expected to increase its share of the mix as the fossil fuel with the best future prospects both for integration with renewable sources and for replacement of other sources with higher environmental impacts, especially in emerging Countries. In 2019 Incidence of natural gas on Eni total equity hydrocarbon production was 52%, and it is expected to grow to around 60% share in Eni's production mix in 2030 and around 85% in 2050.</p> <p>Eni's current business portfolio is strongly linked with the global demand for oil and natural gas. Potential risk factors for Eni are linked with lower hydrocarbons demand. Others market-related risk factors</p>

		<p>are:</p> <ul style="list-style-type: none"> <li>- Loss of results and cash flow.</li> <li>- "Stranded asset" risk.</li> <li>- Impacts on shareholders' returns.</li> </ul> <p>Scenario and market risks and opportunities are internally analysed, assessed and managed within the Eni's Integrated Risk Management process, that includes all the 5 climate-related drivers formalized by TCFD.</p>
<p>Reputation</p>	<p>Relevant, always included</p>	<p>Awareness campaigns by NGOs and other environmental organisations, media campaigns, shareholder resolutions at Shareholders' Meetings, divestments by some investors, and class actions by stakeholder groups are increasingly oriented towards greater transparency on the tangible commitment of Oil &amp; Gas companies to the energy transition.</p> <p>This could lead to potential risk factor for Eni, such as:</p> <ul style="list-style-type: none"> <li>- Impacts on stakeholders' relations.</li> <li>- Impacts on stock price.</li> </ul> <p>Eni has long been committed to promoting a constant, open and transparent dialogue on climate change issues, which are communicated to all stakeholders being an integral part of the company's strategy.</p> <p>Transparency in climate change reporting and the strategy implemented have enabled Eni to be confirmed, once again in 2019, as a leading company with an A- rating in the Climate Change disclosure programme of CDP. In 2019, Eni also improved its rating in the main sustainability ratings by receiving the A score in the MSCI ESG rating and gaining a position in the Sustainalytics rating within the Outperformer group. In addition, Eni has been confirmed for the 14th year in a row in the FTSE4Good Developed Index as of the June 2020 revision; Eni has also joined the Leadership band of Vigeo Eiris' ESG Assessment, which raised Eni's overall evaluation to "Advanced" from "Robust" in its latest review as of July 2020. A decrease in sustainability ratings represents a risk in terms of reputation damage, and Eni continues in promoting transparency as part of a broader view on sustainability issues, to strengthen towards all relevant stakeholders by means of a number of engagement initiatives such as the Chairman's roadshows on governance issues, dialogue with investors and targeted communication campaigns, participation in initiatives and international partnerships.</p> <p>With respect to partnerships and associations, and with the aim of satisfying the expectations of all our stakeholders, including investors, in February 2020 Eni published its guidelines on responsible engagement on climate change within the industry associations. These</p>

		<p>guidelines clearly set the principle issues that Eni considers to be essential for defending the climate, in line with its own strategy.</p> <p>Reputation risks and opportunities are internally analysed, assessed and managed within the Eni's Integrated Risk Management process, which includes all the climate-related drivers formalized by TCFD.</p>
Acute physical	Relevant, always included	<p>According to the Intergovernmental Panel on Climate Change (IPCC), the physical impacts of climate change (e.g. increase of the average global temperature and sea level, hurricanes, cyclones, floods, droughts) observed in recent decades could increase its intensity and frequency of occurrence in the future.</p> <p>This could lead to potential risk factor such as:</p> <ul style="list-style-type: none"> <li>- Interruptions of industrial operations.</li> <li>- Damage to plants and infrastructures.</li> <li>- Recovery and maintenance costs.</li> </ul> <p>As to the intensification of extreme events, Eni's current asset portfolio is widespread in geographies so that there is no high-risk concentration. The area most vulnerable to extreme events is for Eni the Gulf of Mexico - historically hit by tropical storms and hurricanes - where Eni holds interests in 62 exploration and production blocks, in the shallow and deep offshore, of which 26 are operated by Eni itself. Eni applied the Emergency Plan twice in a year due to Tropical Storm Alberto and Hurricane Michael (cat. 5) in both cases due to temporary interruption of Eni operations.</p> <p>Acute physical risks and opportunities are internally analysed, assessed and managed within the Eni's Integrated Risk Management process, that includes all the climate-related drivers formalized by TCFD.</p>
Chronic physical	Not relevant, included	<p>According to the Intergovernmental Panel on Climate Change (IPCC), the physical impacts of climate change (e.g. increase of the average global temperature and sea level, hurricanes, cyclones, floods, droughts) observed in recent decades could increase the intensity and frequency of occurrence in the future.</p> <p>This could led to potential risk factor such as:</p> <ul style="list-style-type: none"> <li>- Interruptions of industrial operations</li> <li>- Damage to plants and infrastructures</li> <li>- Recovery and maintenance costs.</li> </ul> <p>For more gradual phenomena such as the rise in sea level, the vulnerability of Eni assets involved is limited and it is therefore possible to implement specific mitigation actions over the medium to long term.</p> <p>A qualitative assessment has been carried out based on the perspective scenarios available in literature (IPCC scenarios) for chronic climate-change related phenomena. The analysis was focused</p>

		<p>on the potential effects of the coastal erosion in the Egypt's Nile Delta, where some Eni's onshore assets are located. The vulnerability of these assets resulted limited and specific mitigation actions can be implemented to reduce such effects.</p> <p>The analysis will be extended to all the Eni's asset, both Upstream and Downstream.</p> <p>For more gradual phenomena such as the sea level rise and the coastal erosion, the vulnerability of Eni assets involved is limited and it is therefore possible to implement specific mitigation actions over the medium to long term.</p> <p>Chronic risks and opportunities are internally analysed, assessed and managed within the Integrated Risk Management process, that includes all the climate-related drivers formalized by TCFD.</p>
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## C2.3

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

## C2.3a

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

### Identifier

Risk 1

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type & Primary climate-related risk driver

Emerging regulation

Mandates on and regulation of existing products and services

### Primary potential financial impact

Other, please specify

Development of laws, regulations, treaties, or international agreements related to GHG and climate change that could affect Eni's results of operations, liquidity, business prospects and shareholders' returns

### Company-specific description

In the next decades the energy sector is expected to respond to a dual challenge: meeting the rising energy needs of a growing population, ensuring adequate access to energy, and limiting its GHG emissions, in order to contribute to the decarbonization process.

IEA identifies two main options for possible evolution of the energy system: STEPS, Stated Policies Scenario, that considers policies already in place and planned by Governments, with a global energy demand increasing by 1% per year, and the Sustainable Development Scenario, that pursues the main energy goals for sustainable development, including full access to energy, reduction of local pollution and limitation of the temperature increase to well below 2 °C, which leads to a global energy demand in 2040 lower than the current level. Gas, favoured by high plants' efficiency and low emissions, is the only fossil fuel that increases its share in the mix in all IEA's scenarios, and continues to account for around a 1/4 of energy needs. In the IEA scenarios, low-carbon gases (in particular biomethane) play an important role in decarbonizing the gas supply chain, while also guaranteeing the use of existing gas infrastructures.

Eni is an integrated energy company and one of the global oil and gas super-players; because Eni's business depends on the global demand for oil and natural gas, emerging regulations, treaties, or international agreements related to climate change could affect Eni's results of operations, liquidity, business prospects and shareholders' returns.

To analyze the risks associated to a low carbon transition, Eni tests its resilience and competitiveness running a sensitivity analysis on its Upstream assets which represent over 80% of overall company net capital employed in 2019. On a yearly basis, the book value of upstream Cash Generating Unit (CGU) is subject to impairment test against the IEA's Sustainable Development Scenario that considers specific hydrocarbon price assumptions and carbon taxes.

In the IEA SDS scenario:

- energy demand grows at global level in the medium and long term, driven by non-OECD Countries where demand is expected to grow with a CAGR of 0.2% between 2018-40;

- oil and gas continues to maintain a central role up to 2040 covering around 50% of energy needs. low-carbon sources, including nuclear, are expected to double their share in the energy mix reaching more than 40% of the energy demand by 2040 (vs 19% today).

**Time horizon**

Medium-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1,800,000,000

**Potential financial impact figure – minimum (currency)**

## Potential financial impact figure – maximum (currency)

### Explanation of financial impact figure

On annual basis the management run a sensitivity analysis to test the book value resilience to IEA SDS scenario. This review covers all of the Oil & Gas cash generating unit (CGUs) that are regularly tested for impairment in accordance to IAS 36.

The overall outcome of the stress test is the result of two differential impacts on Eni's forecasts, caused respectively by:

- IEA SDS's hydrocarbons price scenario vs Eni's scenario;
- Introduction of IEA SDS CO2 tax vs the current CO2 tax free regulation.

IEA SDS assumptions on CO2 emissions costs in 2040 would reach up to 140 \$ per ton in real terms 2018 (referred to Advanced Economies), which is higher than Eni's CO2 pricing trends and assumptions for the medium-long term.

Financial figures represent the overall impact on asset fair value. In 2019 the stress test gave US\$ 1.8 billion reduction on asset fair value (-2%). Running a worst case theoretical sensitivity where there is no recognition of the contractual and fiscal recoverability of CO2 charge, the impact on the total asset value would grow up to US\$ 7.1 billion (-7%).

Moreover, under the more conservative set of the assumptions which envisages a flat long-term Brent price of 50 \$/bbl and at a flat Italian gas price of 5 \$/ mmBTU, management is estimating that approximately 85% of the Company's proven and probable/possible reserves (risked at 70% and 30% respectively) will be produced within 2035 and 94% of their net present value will be realized.

### Cost of response to risk

700,000,000

### Description of response and explanation of cost calculation

Situation: A continuous growth in a fast developing energy market must go along with a significant reduction of companies carbon footprint.

Task&Action: With specific reference to short-term upstream decarbonisation targets, defined on operated assets and accounted on a 100% basis, Eni keeps on ensuring:

-Reduction upstream GHG emissions intensity index of 43% by 2025 against 2014: in 2019 the index improved by 9% over 2018, with a value of 19.58 tonnesCO2 eq/kboe, linked to the increase in production at new low emissions intensity plants (e.g. Zohr in Egypt and OCTP - Offshore Cape Three Points in Ghana)

- Zero process gas flaring by 2025: in 2019, the volumes of hydrocarbons sent to process flaring, equal to 1.2 billion Sm3, decreased by 15% against 2018 in relation to the contribution of specific flaring down projects (Libya, Nigeria, Turkmenistan).

-Reduction of upstream fugitive methane emissions of 80% by 2025 against 2014: in 2019, upstream fugitive methane emissions were 21.9 kton CH4, decreasing by 44% against 2018, due to Leak Detection and Repair (LDAR) campaigns carried out in the assets at Zohr (Egypt) and Jangkrik (Indonesia) and improved accounting approach for El Feel and Bouri (Libya). The reduction achieved has made it possible to attain the 2025 target six years in advance.

Result: The estimated cost of management - equal to US\$ 700 million- represents Eni decarbonization investments included in the 4 year plan (2020-2023). In particular US\$

400 million are dedicated to upstream decarbonization activities such as flaring down, fugitive emission reduction, carbon efficiency and GHG emission intensity improvement. The residual investments are related to efficiency projects in power generation, refining and chemical businesses.

## Comment

### Identifier

Risk 2

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type & Primary climate-related risk driver

Current regulation

Carbon pricing mechanisms

### Primary potential financial impact

Other, please specify

Increased compliance cost of the European Union Emission Trading Scheme (EU-ETS)

### Company-specific description

The very likely increase of the compliance cost of the EU Emissions Trading Scheme (EU-ETS) is driven by a risk related to the foreseeable rise of the emission allowances price and by the expected increase of the emissions allowance's deficit.

Indeed, given the current legislation in place, The Market Stability Reserve, which has come into effect in 2019, is progressively curbing the allowances supply, thus tightening the market. This is already driving the EU-ETS price up (2019 average allowances price has been 1.6 times higher than 2018 price). On the other hand, the new rules for free allocation reduced the availability of free allowances in the period 2021-2030, contributing to increase the allowances deficit of the industry installations.

The new European Green Deal set out the goal for Europe's economy and society to become climate-neutral by 2050. This goal, expected to be wrote into law by 2020, will imply the definition of a more ambitious EU GHG reduction target for 2030. The EU-ETS allowances supply will thus be further reduced, pushing the price up. Even the free allowances allocation could be potentially squeezed, consistently with a lower EU-ETS cap. In this scenario, the EU-ETS compliance cost will rise. As a consequence, Eni's installations located in Europe could face the risk of a loss of competitiveness on international scale, in particular towards competitors outside EU. However, new policy tools, such as the carbon border adjustment mechanism, are under assessment, in order to safeguards the EU industry competitiveness. In addition, the lack of the harmonization of the compensation for indirect costs caused by the EU-ETS, could have an effect of market distortion between sectors and countries within the European Union. In 2019, almost 50% of the total Eni's operated direct GHG emissions has been under EU-ETS. In that year, Eni has operated 39 installations subject to the EU-ETS, of which

33 located in Italy, 5 in UK, 1 in France. Overall, Eni received a total amount of 7.7 million of free allowances, that covered the 40% of the emissions subject to the EU-ETS (19.3 MtCO<sub>2</sub>). Within Eni, the power sector has the highest exposure on the carbon market, as it does not receive free allowances and accounts for 53% of the Eni emissions subject to EU-ETS.

By 2023, the last year of the 4-year plan, the emissions are expected to increase by 3%, while free allowances are expected to be reduced by 23%, compared to 2019.

### **Time horizon**

Medium-term

### **Likelihood**

Very likely

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, an estimated range

### **Potential financial impact figure (currency)**

#### **Potential financial impact figure – minimum (currency)**

120,000,000

#### **Potential financial impact figure – maximum (currency)**

630,000,000

### **Explanation of financial impact figure**

In 2023, the Eni's extra cost for allowances purchase compared to 2019 could be in the range of US\$120 million and US\$170 million. The potential financial impact has been assessed considering the increased cost to be borne by Eni in 2023 compared to 2019 to purchase the allowances required for the EU-ETS compliance (gross of any potential cost pass-through to final customers). In detail, to calculate the financial impact Eni estimated its deficit in 2023, based on the business plan projections for existing assets and related emissions profiles and decreasing the provisional range (min-max) of 2021 free allocation by 2.2% per year.

The 2023 deficit has been valorised at an estimated nominal price for the European Union Allowances of about 30 €/t. The financial exposure is only a preliminary estimation since the amount of free allowances is still to be officially published by the European Commission. Given the current legislation in place, Eni has also estimated an additional cost for allowances purchase in 2030 compared to 2019 (gross of any potential cost pass-through to final customers) ranging from US\$ 520 million to US\$ 630 million. This financial impact is assessed considering an emission profile flat at 2023 level for all the Eni existing installations by 2030 and a further decrease of free allowance consistently with a tighter benchmark expected in the 2026-2030 period and with a declining cap. The 2030 deficit has been valorised at an estimated nominal price for the European Union Allowances of 50 €/t.



**Cost of response to risk**

250,000,000

**Description of response and explanation of cost calculation**

Situation: Given the current legislation in place, Eni has estimated an additional cost for allowances purchase in 2030 compared to 2019

Task: Eni is committed in improving the carbon efficiency of its production assets, including the ones, which participates in EU-ETS, in order to minimize the needs of purchasing CO2 permits.

Action: Eni has defined a target to improve its carbon efficiency index, which includes all the Eni's businesses, by 2% per year between 2014 and 2021. With particular reference to its downstream business, including power, Eni plans to implement new projects that will guarantee, at full operation, energy savings of more than 52 k toe/y, corresponding to an emissions reduction of 196 kt/y. Additional GHG saving could come from the use of low carbon fuels made available by R&D programs

Result: In 2019, the index was 31.41 tonnes CO<sub>2</sub>eq /kboe, with a 7.4% decrease against 2018 (33.90 tonnes of CO<sub>2</sub>eq/kboe) due to the contribution of the upstream sector and an improvement in refining activities. Although the target for reduction set for 2021 has already been achieved, Eni continues to strive towards progressive 2% improvement over the coming years.

Furthermore, Eni has a dedicated team in London that is in charge of CO<sub>2</sub> trading, monitoring the market, minimizing financial risks and catch any opportunities. In 2019 Eni purchased on the European carbon market about 12 million emissions permits - European Union Allowances (EUAs).

The estimated cost of management is equal to US\$ 250 million and represents the value of downstream decarbonization measures and technical investments to be implemented in the period 2020-2023. In particular, around US\$ 40 million are dedicated to energy efficiency measures on Eni power plants in Bolgiano, Brindisi, Ravenna and Mantova while the remaining US\$ 210 million will be spent on interventions within Versalis production sites in Dunkerque, Brindisi, Marghera and other Refining and Marketing business.

**Comment****Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

**Primary potential financial impact**

Increased direct costs

### **Company-specific description**

The intensity and frequency of the physical impacts of climate change observed in the last decades are expected to increase in the next future according to the IPCC V Assessment Report and other reference studies, that indicate a potential intensification of both acute phenomena (extreme weather conditions, in the short term, such as hurricanes) and chronic phenomena (e.g. sea level rise, coastal erosion whose effects are estimated more gradual over time), having direct and indirect impacts on industrial assets as well as ecosystems and populations (e.g. loss of Biodiversity, desertification and water stress, migrations and famine).

For more gradual phenomena such as the rise in sea level, the vulnerability of Eni assets is limited, and it is therefore possible to implement specific mitigation actions in the medium to long term. In short, according to our model, the risk of chronic event is not relevant.

As to the intensification of extreme events, Eni's current asset portfolio has a geographical distribution that does not result in high risks concentrations. The most vulnerable area to extreme events for Eni is the Gulf of Mexico - historically interested by tropical storms and hurricanes - where Eni holds interests in 82 exploration and production blocks, in the shallow and deep offshore, of which 46 are operated by Eni itself. In 2019 Eni applied the Emergency Plan only once due Hurricane Barry (cat. 1) that led to temporary interruption of operations in four facilities operated by Eni in Gulf of Mexico. In the case of extreme events in the Gulf of Mexico, Eni has assessed the potential economic exposure in terms of damages to assets and loss of production and has identify potential mitigation actions. With regards to adaptation strategies Eni launched the project "Adaptation to climate changes. Risks and opportunities linked to Climate Changes in Countries of interest to Eni" with the Cooperation of the Eni Enrico Mattei Foundation (FEEM) and the Scuola Superiore Sant'Anna.

The goals of the project are to define guidelines and adaptation measures addressed to the industrial activities and to Countries of interest to Eni, also from the viewpoint of business continuity and the contribution to the local development of communities.

### **Time horizon**

Short-term

### **Likelihood**

Very unlikely

### **Magnitude of impact**

Medium-low

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

450,000,000

### **Potential financial impact figure – minimum (currency)**

## Potential financial impact figure – maximum (currency)

### Explanation of financial impact figure

With reference to the US Gulf of Mexico, Eni holds interests in 82 exploration and production blocks in the shallow and deep offshore, of which 46 are operated by Eni. In 2019 Eni's production in the Gulf of Mexico (US and Mexico) was about 61,8 kboe/d, corresponding to about 3% of Eni equity production in 2019. The analysis shows a marginal increase in the exposure of both risk to asset (covered by specific insurance) and business interruption (average of 107 kboe/y lost for hurricanes). In the worst-case scenario (total loss of the platform at highest risk) the maximum potential financial impact is US\$ 450 million, which decrease up to US\$ 300 million net of insurance coverage.

### Cost of response to risk

6,188,000

### Description of response and explanation of cost calculation

**Situation:** Eni holds interests in several exploration and production blocks in Gulf of Mexico in the shallow and deep offshore, which might be exposed to physical risks related to extreme climate events.

**Task:** Analyse and quantify physical risks related to climate change, as well as identify adaptation strategies.

**Action:** Eni has developed a model for the quantitative assessment of the differential risk exposure to simulate the impacts of the intensification of the extreme events from climate change scenarios based on historical data, by increasing wind speed and hurricane trajectory variation. In addition, Eni launched a project for the definition of guidelines and adaptation measures addressed to the industrial activities and to Countries of interest to Eni, also from the viewpoint of business continuity and the contribution to the local development of communities.

**Result:** Eni's current asset portfolio has a geographical distribution that does not result in high risks concentrations. The most vulnerable area is the Gulf of Mexico where we hold interests in 82 exploration and production blocks, in the shallow and deep offshore, of which 46 are operated by Eni. The analysis shows a marginal increase in the exposure of both risk to asset and business interruption. With regards to studies on "Adaptation to climate changes", appropriate guidelines have been defined for developing adaptation actions that include risk, potential impacts and opportunities assessments. These guidelines introduce a methodological approach for an economic evaluation of actions or inactions that correspond to the benefit (i.e. avoided damage) produced by adaptation action.

The analysis' results allowed to identify as mitigation actions the integration of appropriate technical measures to the assets with greater exposure to hurricanes; the inclusion of the climate change risk in the project Risk Register and in the definition of the Basis of Design; adequate insurance coverage for hurricane risk.

The estimated cost of management is equal to US\$ 6.15 million and represents the insurance costs for damages to asset due to hurricanes impact in Gulf of Mexico and US\$ 38,000, namely the costs associated to the project on Adaptation to climate changes.

**Comment**

Eni is drafting a Position paper on adaptation to Climate Change that takes into account the needs of adapting its operating realities with those of the surrounding environment and local communities, based on actions aimed at achieving the Sustainable Development Goals (SDGs), in line with its mission in countries that have or are implementing international (NAP and NAPA) and national (NDC) adaptation strategies and/or action plans.

**Identifier**

Risk 4

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Current regulation

Mandates on and regulation of existing products and services

**Primary potential financial impact**

Decreased revenues due to reduced production capacity

**Company-specific description**

The Italian regulation (PNIEC - Piano Nazionale Integrato Energia e Clima 2030) foresees a share of renewable energy in transport sector of 22%, a share much higher than the comprehensive EU target set at 14%. Moreover, regarding feedstock use, the European Union REDII Directive sets gradually phase out of the feedstocks with "high indirect land-use change-risk" between 2023 -2030. This rule will strongly limit the availability of palm oil and derivatives as a primary feedstock.

Growth of green fuels is one of the objectives of decarbonization strategy and is primarily ensured by our downstream activities and relevant investments: "bio" refining capacity will grow up to 1 million tons per year by 2021 and up to 5 million tonnes per year in 2050. Moreover, from 2023 it will be excluded with palm oil as feedstock targeting all alternatives maximizing 2nd and 3rd generation feedstocks,

To this regard, Eni set itself a challenging goal several years ago, by converting traditional refineries into bio-refineries in Porto Marghera and Gela. Currently the feedstock used by Eni's bio-refineries is at 75% is palm oil, reducing it to 50% and less by 2021, as economics and marketing could be affected by new regulations.

**Time horizon**

Medium-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

200,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

With reference to our bio-refineries and the policy driver, a sensitivity analysis has recently been performed in order to evaluate maximum financial impact indirectly caused by “legal” constraints regarding feedstocks as adopted in the REDII and proposed in the Italian regulation. The alternative feedstocks (advanced/unconventional) could not be available in the quantities required by law and as a consequence bio-refineries would run at a lower pace. Due to the shortage of alternative feedstock, maximum financial impact is calculated assuming a 50% reduction of the contribution margin in 2025.

**Cost of response to risk**

85,000,000

**Description of response and explanation of cost calculation**

Situation: The REDII limits the share of unsustainable crop-based biofuels and promotes biofuels produced from sustainable waste and residues.

Task: Eni aims to be 100% palm oil free by 2023 with a total biofuel capacity of 1 Mton by 2021 (target already achieved in 2019) and 5 Mton by 2030.

Action: These objectives will be achieved investing in R&D and process plant improvement, aimed at producing advanced feedstocks and increasing the supply of alternative feedstocks available in the domestic market. In this context, Eni’s most significant projects are:

- Waste to Fuel pilot plant built in Gela, which transforms the organic fraction of solid municipal waste into bio-oil through a hydrothermal liquefaction process and the recovery and treatment of the water contained in it;
- experimental project concluded in Tunisia in 2018, for the cultivation of castor beans on pre-desert soils, unusable for food crops. This cultivation provides a biomass suitable for the Eni biorefineries. Given the positive result, an assessment has begun for the start up of wide-scale cultivation. To this end, last December a cooperation agreement was signed with the Tunisian company SNDP;
- Ragusa CO<sub>2</sub> bio-fixation in algae pilot plant, using light energy (from solar concentrators) as a nutrient for algae growth. Oil extracted from the algae flour can be used in biorefineries instead of the current raw material. In this way, the biomass used to feed the biorefinery is not in competition with agricultural crops for food use and it could be classified as “advanced” according to the EU RED II Directive.

In addition, specific investments are taken in order to meet the increasing demand of biofuels as envisaged by regulations and to allow the bio-refineries to work at full capacity.

Result: Eni reached in 2019 a total feedstock capacity of over 1 million tonnes, two years before expected. Considering all the actions in place part of Eni long Term strategy, Eni is in the condition to reach the target of 100% palm oil free in 2023 using a diversified portfolio of alternative feedstocks.

The estimated cost of management is equal to US\$ 75 million and represents the capex to produce biofuels from sustainable waste and residues (advanced / unconventional feedstocks). Around US\$ 55 million are dedicated to new Waste to Fuel plants, while the remaining US\$ 20 million are dedicated to castor beans and algae bio-fixation projects.

### Comment

## C2.4

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

### C2.4a

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

#### Identifier

Opp1

#### Where in the value chain does the opportunity occur?

Direct operations

#### Opportunity type

Products and services

#### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

#### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

#### Company-specific description

According to IEA Sustainable Development Scenario gas becomes by 2040 the first “single” source in the energy mix and the only fossil fuel growing in absolute terms and in its share of energy mix. Natural Gas is widely considered the ideal partner for the development of renewables, which still have some economic and technological limits when deployed on a large scale. In particular, the development of gas projects near growing markets in emerging economies with increasing energy needs and the sale of domestic gas in these countries allows not only to access to energy but also to enhance the decarbonization process, because natural gas is often a cleaner source compared to

the alternatives available.

Eni is a major player of natural gas value chain and it provides also energy to local markets. In 2019 over 73% of the total gas sold was produced for local markets, while in 12 Countries this percentage reached 100%.

Especially in Africa, Eni invests in the construction of thermal power stations by using the associated gas, traditionally flared, to diversify the energy mix (50% biomass and coal) by introducing a cleaner source such as natural gas. Some examples are:

- Egypt: between 2017 and 2018 the acceleration of the Nooros and Zohr projects allowed Egypt to become self-sufficient and to save more than US\$ 7 billion in LNG imports;
- Nigeria: Okpai power station, with a primary installed capacity of 480 MW, in 2019 generated approximately 1,400 GWh;
- Libya: Eni supplies almost all the gas needed by national power plants, in 2019 4 power stations have been revamped, generating 2GW of power;
- Congo: Following the acquisition in 2007 of the onshore M'Boundi gas field in Congo, Eni has developed a large-scale energy access model. Since 2010 the CEC has been supplying electricity to the cities of Pointe-Noire and Brazzaville.

#### **Time horizon**

Short-term

#### **Likelihood**

Likely

#### **Magnitude of impact**

High

#### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

#### **Potential financial impact figure (currency)**

6,200,000,000

#### **Potential financial impact figure – minimum (currency)**

#### **Potential financial impact figure – maximum (currency)**

#### **Explanation of financial impact figure**

The financial impact estimation of US\$ 6.2 billion takes into account the revenues in 2019 from domestic sales of natural gas. Selected Countries such as Egypt, Pakistan, Nigeria, Libya, Ghana, Congo, account for 70% of the total amount, with a 2019 total revenue of US\$ 4.4 billion. The remaining 30% revenues are generated in other countries where Eni operates, such as Italy, UK, Norway, Indonesia, Kazakhstan, Venezuela and Australia.

#### **Cost to realize opportunity**

12,000,000,000

### Strategy to realize opportunity and explanation of cost calculation

Situation: Gas is a bridge solution to a low carbon future, especially in Africa, where the energy mix is currently composed of 60% biomass and coal.

Task: Therefore, Eni targets a 60% share of the production mix by 2030 and around 85% by 2050.

Action: In order to reach its goals, Eni intends to maximize the use of gas as a bridge fuel for the long-term energy transition, making the portfolio of the Group more sustainable through various activities:

- in emerging Countries with growing energy needs, especially in Sub-Saharan Africa, Eni is committed to research and develop gas resources for local markets to access energy and energy mix diversification with low impact sources.
- in the LNG sector, growing its traded volumes portfolio to 14 MTPA by 2022 and up to 16 MTPA by 2025.
- exploiting technological solution like Carbon Capture and Storage applied to electricity generating plants, LNG plants and for production of blue hydrogen to reduce the carbon footprint of gas originating from equity production.
- promoting the implementation of voluntary action and partnerships in various initiatives e.g. European EPS, that promote the use of fuels with lower emission intensity and natural gas consumption.

Results: In 2019 Eni traded 9,5 MTPA LNG volumes, 56% from Eni equity production. Moreover, the hydrocarbon equity resources at 31/12/2019 show that natural gas accounts for over 50%.

In the 2020-2023 plan, 44% of overall upstream investments are addressed to gas projects. The estimated cost to realize the strategy is equal to about US\$ 12 billion and represents the share of upstream investments addressed to gas projects. In details US\$ 10 billion are dedicated to gas projects development, while the remaining US\$ 2 billion are dedicated to exploration and other investments.

### Comment

#### Identifier

Opp2

#### Where in the value chain does the opportunity occur?

Direct operations

#### Opportunity type

Products and services

#### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

#### Primary potential financial impact

Increased revenues through access to new and emerging markets



## Company-specific description

By 2040, oil and gas will continue to meet about 50% of energy needs, in both IEA scenarios STEPS and SDS; gas and renewables are the sources with the highest growth rate in the next decades. In particular, according SDS, renewable sources (excluding biomass) expands in all regions.

Eni has put great energy into its strategy to develop a renewable energy business. In the next years Eni has planned to install power from renewable sources of about 5 GW in 2025 with the ambition of reaching over 25 GW by 2035 and over 55 GW by 2050. In the next four years, Eni will continue to develop projects both in Italy and abroad, targeting a total installed capacity of approximately 3 GW by 2023, confirming an target of 5 GW by 2025, with the ambition of reaching over 25 GW by 2035 and over 55 GW by 2050.

From a geographical point of view, in the medium and long term Eni intends to consolidate its presence in non-OECD regions (e.g. Kazakhstan, Pakistan, Tunisia, Algeria) and to develop new projects in OECD countries (e.g., Italy, Australia, United States) characterized by low risk profiles and valuable opportunities.

This geographical diversification will make our portfolio well balanced, also thanks also to synergies with other Eni businesses.

Eni has already realized many projects and developed and initiatives at different stage of maturity are planned. Below the main projects:

- ITALY: 31 MWp in Porto Torres, production partly used in Eni's on-site operations and connected to the national grid; 23 MWp in Assemini, production partly used in the industrial plant and connected to the national grid and 18 MWp in Volpiano, production connected to the national grid.
- KAZAKHSTAN: 48 MW wind farm in Badamsha, to provide renewable energy to the country.
- AUSTRALIA: 34 MWp photovoltaic plant with energy storage in Katherine. In 2019, Eni has obtained a project for the development of two more photovoltaic plants for a total capacity of 25 MW, whose construction has started at the beginning of 2020.
- USA: March 2020, Eni finalized the acquisition from Falck Renewables North America (FRNA), of a 49% stake of 5 assets already in operations and an energy storage system, totalling 116 MW.
- PAKISTAN: 10 MW Bhit plant, built by Eni New Energy Pakistan, to reduce gas consumption of the near upstream field.
- ALGERIA: 10 MW solar plant (Eni's interest 50%) at the Bir Rebaa oil field, run jointly by Eni and Sonatrach, to make Upstream activity self-sufficient in terms of energy.

## Time horizon

Medium-term

## Likelihood

Likely

## Magnitude of impact

High

## Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

**Potential financial impact figure (currency)**

550,000,000

**Potential financial impact figure – minimum (currency)****Potential financial impact figure – maximum (currency)****Explanation of financial impact figure**

The financial impact is estimated equal to US\$ 550 million and it refers to annual revenues from renewables once the 5 GW of installed capacity will be operational in 2026. This reflects a mix of portfolio projects and of technologies employed (about 80% photovoltaic and 20% wind) already in operations or under development/scouting in different Countries. In general terms, our remuneration profile has been estimated using the following assumptions:

- for projects already developed, the expected projection of contracted prices of existing PPAs, Feed-in Tariff, or merchant price forecasting (e.g. in Italy or in other OECD Countries, where the renewable market is more structured and mature);
- for projects under development or scouting we refer to internal estimates and evaluations for price and producibility, defined on the basis of market consensus and databases of main market info-provider (such as Wood Mackenzie, BNEF, AFRY).

In order to define the utilization rate of installed capacity by 2025, a Load Factor equal to 22% has been used (approximately 20% photovoltaic, 40% wind).

Taking into account these factors, our renewables projects, on a stand-alone basis, are defined to deliver stable cash flows in the long term, with expected returns for projects spanning from an unlevered base of 7% to double digit IRRs through group synergies and financial leverage. Additional value will be provided by building an integrated green power value chain integrated with other Eni's businesses.

**Cost to realize opportunity**

3,100,000,000

**Strategy to realize opportunity and explanation of cost calculation**

Situation: According to the IEA SDS scenario, renewables will increase their share within the energy mix and decrease their cost of production.

Task: Eni's medium to long-term strategy goal is to maximise renewables development, leveraging on strategic and commercial partnerships with third parties and synergies with other Eni's businesses.

This growth will be mainly organic, but Eni will also leverage on selected M&A operations of projects and assets, when they fit in its strategic view and represent an opportunity for an accelerated growth in renewables.

Eni has planned an increased commitment on renewable energy, targeting an installed capacity of over 55 GW by 2050. This capacity is set to reach 5 GW in 2025 with the ambition of reaching around 15 GW by 2030 and over 25 GW by 2035.

Action: In order to reach these challenging targets, in 2019 Eni continued its commitment in the renewable energy business fostering its distinctive model based on

the integration with other business lines and existing assets with a focus on the Countries in which Eni has a consolidated presence, solid commercial relations, knowledge of the energy markets and local needs. In terms of technology, Eni confirms its technology neutral approach, with a focus on solar (about 80%) and onshore wind projects (approximately 20%) and an increasing exposure to energy storage solutions as well as the introduction of innovative technological solutions that are currently being studied by the R&D department.

Result: During 2019 Eni has increased four times its total installed capacity with respect to 2018 year-end, reaching as of December 31, 2019 over 170 MWp (net to Eni and including storage capacity), of which approximately 82 MW in Italy and 92 MW abroad. In the first months of 2020, this capacity has increased to more than 250 MW thanks to the acquisition of interests in 5 solar plants by Falck Renewables in the USA (116 MW including 3 MW of storage, Eni's interest 49%), the construction of Tataouine plant in Tunisia (10 MW, Eni's interest 50%), as well as the finalization of Eni's first wind farm of Badamsha in Kazakhstan (48 MW) and the photovoltaic plant of Volpiano in Italy (18 MW).

In 2020-2023 period, the estimated cost to realize the strategy is equal to approximately US\$ 3.1 billion, of which around US\$ 500 million dedicated to Italy. The remaining US\$ 2.6 billion are dedicated to international projects in Africa and in other countries e.g. USA, Kazakhstan and Australia.

## Comment

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### Identifier

Opp3

### Where in the value chain does the opportunity occur?

Direct operations

### Opportunity type

Products and services

### Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

### Company-specific description

Biofuels are anticipated to account for around 4.5% of world road transport energy demand by 2025 (IEA Oil 2020) due to robust growth prospects in emerging economies in Asia, Brazil and stronger market prospects for hydrotreated vegetable oil (HVO) in the United States and Europe. European Union legislation is a key driver in the move towards biofuels, such as HVO. The second phase of the EU's Renewable Energy Directive (RED II) requires 14% of energy in transport to come from renewable sources

by 2030. It also imposes a cap at 7% on crop-based biofuels. Although there has been a large focus on electromobility the pace of growth in this area is still moderate with substantial challenges for the commercial sector. HVO is an area expected to grow as European countries seek to increase biofuel blending beyond 7% (B7) in diesel.

Eni promotes circular economy starting from one of its core businesses: refinery. Eni forecasts to invest in bio-refineries worldwide to arrive at 5 MTPA bio-fuels capacity in 2050 starting from a range of diversified feedstocks to become palm oil free by 2023. Italian sites will be converted to produce hydrogen, methanol, bio-methane and products from waste.

Eni paired its traditional downstream business with the production of green fuels by converting traditional refineries into biorefineries, using the Ecofining proprietary technology (production of green diesel with a high level of performance through a flexible hydrogenation process and with different types of biological raw materials). The initiatives implemented in Gela and Venice reached a feedstock capacity of over 1 million tonnes in 2019.

In the Petrochemical sector, chemicals from renewable feedstock are a strategic technologies for the production of high-quality products. As part of its commitment to contribute to the decarbonization process, Eni is active in the green chemistry sector through its dedicated company Versalis, offering products from renewable feedstock for high value-added applications, new processes and products through polymers recycling and plastic waste valorization. For example: Versalis Revive®: New life for post-consumer plastic (the first range of products with a different polymeric base styrenics and polyethylene containing post-consumer plastic, developed at the Versalis research laboratories) and Hoop™, chemical recycling towards an infinitely recyclable plastic.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

2,000,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The financial impact of US\$ 2 billion is the estimated yearly considering the expected annual revenues at 2025 of circular economy and green business activities (i.e. green

refineries) without renewables. Around US\$ 2 billion come from Gela and Porto Marghera biorefineries, US\$ 26 million from Versalis green activities and the rest from Waste to Fuel plants from Eni Rewind.

### **Cost to realize opportunity**

1,100,000,000

### **Strategy to realize opportunity and explanation of cost calculation**

**Situation:** In line with its decarbonization strategy and to seize once the opportunities related to increase interest on more sustainable products in the mobility sector (see REDII directive).

**Task:** Eni objective is to reach 1 Mton of green-diesel production by 2021 and to increase by 2025 its bio-fuels installed capacity. In 2050 Eni will reach 5 MTPA bio-fuels capacity, diversifying feedstocks to become Palm Oil free by 2023 and producing hydrogen, methanol, bio-methane and other products from waste. In 2050 100% of service station products will be blue, green and bio.

**Action:** Eni has been converting traditional refineries into bio-refineries, using a proprietary technology to produce green-diesel from raw materials and other feedstock (waste, oils, animal fats, by-products from the food industry, etc.). Moreover, In Gela a Waste-to-fuel pilot system will produce from the organic fraction of solid urban waste (FORSU) a second-generation bio-fuel, which could be used as feedstock in the green-diesel production, recovering 70% of the water contained.

Through its Biotech business unit, Versalis is continuing its commitment in strengthening its competitive positioning in chemicals from renewable sources, creating synergies between its own research projects and developing integrated technological platforms in line with the development strategy undertaken in recent years.

**Result:** In 2019 Eni worked on the start-up of Gela plant. Thanks to this plant and Venezia's one in 2019, 304 thousand tonnes of biomass were transformed into 204 thousand tons of green diesel, 38 thousand tons of green naphtha and 14 thousand tons of green LPG with emissions savings of about 450 thousand tons of CO<sub>2</sub> compared to traditional processes. The initiatives implemented in Gela and Venice reaching a total feedstock capacity of over 1 million tonnes in 2019.

The cost to realize opportunity refers to capex in circular economy in 2020-2023 period, the total amount is US\$ 1.1 billion. In particular around US\$ 400 million are dedicated to R&M projects such biorefineries' upgrading, other US\$ 400 million will be invested in green-chemistry through Eni subsidiary Versalis and the remaining US\$ 300 million to Eni Rewind projects e.g. solid urban waste (FORSU) conversion plants.

### **Comment**

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### **Identifier**

Opp4

### **Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Resilience

**Primary climate-related opportunity driver**

Resource substitutes/diversification

**Primary potential financial impact**

Other, please specify

Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon

**Company-specific description**

In the framework of global efforts to reduce GHG emissions in line with the objectives of the Paris Agreement, Eni aims to achieve the net zero carbon footprint on direct emissions of upstream activities by 2030 increasing the efficiency of its upstream activities, reducing GHG emissions and developing forestry conservation projects Eni aims to contribute reducing CO2 concentration in the atmosphere and Eni targets to avoiding CO2 emissions from land use change up to 20 Mton CO2 /year by 2030. In particular, Eni's approach includes halting deforestation and forest degradation and pursues the role of conservation, sustainable management of forests and enhancement of forest carbon sinks implementing REDD+ projects (Reducing Emissions from Deforestation and Forest Degradation) under the framework established by UNFCCC (United Nations Framework Convention on Climate Eni aims to support developing Countries in implementing REDD+, depending on Country needs. These projects aim to reduce deforestation, increase carbon storage capacity and preserve and protect biodiversity, while also ensuring social benefits for local populations. We'll use one of the methodologies implemented by Verra for Verified Carbon Standard for the voluntary carbon market. Also, the methodology will be consistent with both the Country's REDD+ framework and methodological approach. Projects, indeed, will enable economic diversification activities with the creation of new employment, easing local development, in line with the National Development Plans and the Agenda 2030. Moreover, Eni participates to international initiatives and strategic partnerships with experienced third parties.

**Time horizon**

Medium-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1,500,000,000

**Potential financial impact figure – minimum (currency)****Potential financial impact figure – maximum (currency)****Explanation of financial impact figure**

Financial impact figures of US\$ 1.5 billion are calculated assuming the value created by investing in forestry projects in developing countries. The opportunity comes from the potential full recognition of credits generated by voluntary markets, which may occur when:

- REDD+ related carbon credits would be integrated into the new Paris Agreement international carbon credits markets;
- National NDCs would allow international companies to use locally-produced carbon credits to offset their global emissions.

To calculate the financial impact, Eni direct CO<sub>2</sub> emissions in 2030 offset by forestry carbon credits have been valorized based on SDS IEA carbon prices. CO<sub>2</sub> valorization is differentiated by:

- advanced economies (100 \$/tCO<sub>2</sub> in real term 2018@2030);
  - developing economies (75 \$/tCO<sub>2</sub> in real term 2018@2030);
- corresponding respectively to 40% and 60% of Eni direct emissions in 2030.

**Cost to realize opportunity**

140,000,000

**Strategy to realize opportunity and explanation of cost calculation**

Situation: Literature studies defined 20 Natural Climate Solutions (NCS) options that could deliver more than a third of the GHG reductions needed to meet the Paris goals by 2030 at less than \$100/t, with 1/3 of those below \$10/t.

Task: Carbon offsets generated by REDD+ projects could be voluntarily used by Eni to offset part of its emissions, achieving net-zero carbon footprint in UPS activities by 2030, and Eni targets to have in place projects to absorb around 10 Mton/y of CO<sub>2</sub> by 2025, 20 Mton/y of CO<sub>2</sub> by 2030 and more than 30 Mton/y by 2050.

The final aim is to be directly involved in the planning and execution of projects, guaranteeing that all social and environmental benefits are delivered to the local communities and the hosting Countries with the consequential additional benefit of the generation of carbon sinks. Projects selection will see the direct involvement of governments, ensuring synergies with their NDCs.

Action: Eni will develop and participate in REDD+ projects to preserve primary and secondary forests and biodiversity, supporting the UN Sustainable Development Goals. Eni plans to implement REDD+ projects using a strategy based on cooperation agreements with international and experienced developers. Geographies currently being explored have the highest potential in terms of abatement and a REDD+ framework in an advanced status.

Results: Eni has already signed MoU with international developers and started the

opportunities selection process. Eni has already signed a long-term purchase agreement of a REDD+ project in Zambia. In November 2019 this agreement has been amended in order to allow Eni to be active part of the governance of the project. Furthermore, Eni has set-up partnerships or discussions with governments and international developers in Mozambique, Vietnam, Mexico, Ghana, Angola. The cost to realize the strategy is equal to US\$ 140 million equal to the investments on REDD+ projects in 2020-2023 plan, of which circa 80% spent in project development in Africa and residual 20% mostly in Latin America and Far east.

### Comment

Eni decided to take advantage of the opportunity to invest around \$140 million in 2020-2023 plan, aiming at developing REDD+ projects certified with the most accredited standards worldwide and capable to deliver permanent emissions reductions and social/economic development for the local communities living in the area, where REDD+ projects are carried on.

### Identifier

Opp5

### Where in the value chain does the opportunity occur?

Direct operations

### Opportunity type

Products and services

### Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

### Primary potential financial impact

Increased revenues through access to new and emerging markets

### Company-specific description

The shift to a low-carbon energy sector is linked to the development of innovative/break-through technological solutions and consequent need of upgrading the energy infrastructures.

Eni is working on a range of technologies focusing on three main drivers: circular economy, carbon neutrality, which includes new advanced systems for conversion of renewable energies and transformation of CO<sub>2</sub> into useful products, and operating excellence, oriented towards improving existing business areas in terms of efficiency and economic and environmental sustainability.

The R&D department is currently working on many activities, for example:

- Find new ways to capture carbon dioxide: An example is biofixation in algae, a process involving capture of carbon dioxide molecules by microscopic algae, cultivated intensively in photobioreactors. In addition to reducing emissions by sequestering the carbon dioxide that makes the algae grow, the system has the advantage of not occupying agricultural land and of producing a high-lipid flour, from which an oil can be extracted and sent to the Eni biorefineries. The process water, lastly, is channelled back



into the photobioreactors where the subsequent generation of microalgae will grow.

- Produce energy from renewable sources: Eni is developing innovative technologies that can be easily integrated into upstream and downstream activities, in particular the latest generation of solar systems, based both on concentrated solar power (CSP), and on organic photovoltaics (OPV), an innovative technology that, by using semiconducting polymers as the photoactive element in place of the traditional silicon and other inorganic semiconductors, are characterised by lightness, flexibility, easy installation and a high level of recyclability. Again, in the world of renewable energy, a field in which Eni is investing is production of electricity from the movement of waves, with a floating system that turns the motion of sea waves into electricity, to power offshore plants or small communities along the coast. A pilot plant is already in operation in Ravenna, and is connected to the PC80 platform and integrated into a hybrid smart grid system unlike any other in the world made up of photovoltaic cells and an energy storage system.
- Create energy from waste: Eni is also researching on Waste to Fuel technologies which exploit hydrothermal liquefaction to process organic urban waste to obtain bio-oil.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1,800,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

An internal procedure has been developed to quantify the value generated by the application of innovative technologies under development. For each technology, three deployment scenarios are evaluated (min, med, max) in terms of diffusion of deployment and technology performance. The potential financial impact figure is based on the expected monetary value generated by the main technologies focused on circular economy and carbon neutrality in the next 10 years (gross).

**Cost to realize opportunity**

900,000,000

**Strategy to realize opportunity and explanation of cost calculation**

Situation: Research and Development at the service of the carbon neutrality strategy is a key element to develop technologically innovative initiatives targeted at reducing greenhouse gas emissions, supporting development of a resilient project portfolio with a low carbon content.

Task: Eni's transformation into an integrated energy company with an ever lower carbon footprint must focus on Research and Development (R&D), which includes both the availability and the development of cutting-edge technological competencies, and the continuous effort to multiply the scope of the identified energy solutions.

Innovation is, for Eni, a lever to create value and grow as a company, through the development of new technologies and their rapid field implementation on an industrial scale.

Action: In the 2020-2023 four-year period, 80% of R&D expenditure will be for projects related to carbon neutrality and circular economy. Research projects pertain to every aspect of the production chain, with the goal of reducing risks and increasing efficiency, consolidating technological leadership and generally obtaining more quality, efficiency and sustainability in products, plants and processes. Efficiency also pertains to the minimisation of direct CO<sub>2</sub> emissions, the reduction of waste and the valorisation of scrap materials to assure the smallest possible environmental impact

Result: In 2019, the estimated tangible value generated was €1,126 million, an increase from the previous year thanks mainly to the contribution of:

- Proprietary software boosting the accuracy of the analyses carried out, for example reducing exploration risk and shortening the assets' time-to-market;
- Technologies that enable to identify the best structures during drilling, allowing the optimal positioning of wells in a timely manner and boosting their productivity;
- Software to optimise operating parameters in real time, with consequent increase in the efficiency of field operations;
- New fuels with low carbon impact, energy saving lubricants and biochemicals.

The cost to realize opportunity is US\$ 900 million i.e. the total spending in planned research over the next 4 years aimed at carbon neutrality (US\$ 450 million) and circular economy (US\$ 450 million).

#### **Comment**

Eni also supports the Oil and Gas Climate Initiative on new carbon capture and storage technologies with a US\$ 10 million/year for 10 years from 2017 and the Commonwealth Fusion Systems for fusion power generation technology industrial development in collaboration with Massachusetts Institute of Technology (initial investment of \$50 million).

## **C3. Business Strategy**

### **C3.1**

#### **(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?**

Yes, and we have developed a low-carbon transition plan

### C3.1a

**(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?**

Yes, quantitative

### C3.1b

**(C3.1b) Provide details of your organization's use of climate-related scenario analysis.**

Climate-related scenarios and models applied	Details
IEA Sustainable development scenario	<p>Eni supports the goals of the Paris Agreement to limit temperature increases to well below 2 °C. The IEA SDS sets out an energy pathway consistent with this goal and is taken as a reference for the energy sector and in particular for the definition of Eni's long term Decarbonization strategy, in order to assess energy transition risks both in regard to:</p> <ol style="list-style-type: none"> <li>1. Evaluation of the resilience of Eni's asset portfolio</li> <li>2. Definition of KPI and Company reduction trends up to 2050, aligned with the targets of the Paris Agreements,</li> </ol> <p>1 - The resilience of the investment's portfolio is measured through a monitoring process aimed at identifying and assessing the potential risks deriving from the market scenario and from legislative and technological evolution.</p> <p>The profitability of the most important new investment projects is subjected to a sensitivity to carbon pricing using two sets of assumptions:</p> <ul style="list-style-type: none"> <li>• Eni's hydrocarbon price and CO2 cost scenario;</li> <li>• IEA SDS assumptions on hydrocarbon price and CO2 cost</li> </ul> <p>By adopting the IEA SDS scenario, which envisages the global application of a steeply rising cost for direct CO2 emissions, the overall IRR would be reduced by 0.7 percentage points. The resilience of Eni's asset portfolio also reflects the sensitivity analysis to which the upstream CGUs (Cash Generating Units) are subjected.</p> <p>The stress test conducted on the IEA SDS scenario has shown the overall stability of the book values of the upstream assets with a 7% reduction of the fair value assuming non-deductibility of the costs of CO2 emissions, that is 2% in the event of recognition of the contractual and fiscal recoverability of CO2 charges. Analysis of the production profile for the 3P reserves fully demonstrates resiliency and flexibility of Eni's current portfolio.</p> <p>-The hydrocarbons pricing assumptions of the IEA SDS scenario are slightly lower than Eni's pricing assumptions regarding crude oil (for example in 2040 the price of crude oil is projected to be 10% lower in the IEA SDS scenario compared to Eni's own assumptions), while gas prices in the IEA SDS scenario are projected to be slightly higher than Eni's scenario.</p> <p>-CO2 emissions costs are valorised according to IEA SDS CO2 tax scenario,</p>

	<p>which shows a strong uptrend consistent with the goal of encouraging the adoption of low carbon technologies. The tax scenario, which is in real terms 2018, is applied up to 2040 considering an average inflation rate of 2%. In the following decade (2040-2050) this scenario is extended assuming a Compounded Annual Growth Rate equal to 4% for Advanced Economies and 4,7% for Developing Economies.</p> <p>IEA SDS CO2 tax scenario is higher than Eni's CO2 pricing trends and assumptions for the medium-long term.</p> <p>2- The evolution of the business portfolio will have a significant impact on Eni's carbon footprint reduction, the goals of which have set the basis for the operating strategies and goals up to 2035 and to 2050. Eni's decarbonization path will lead to an 80% reduction in net absolute emissions by 2050, well above the 70% target indicated by IEA in the SDS compatible with the Paris Agreement, and to a 55% reduction in the emission intensity. These targets have been announced during the strategy presentation of Eni in February 2020. The IEA SDS forecast a peak in global CO2 emissions by 2025, an average decline of 4% per year after that peak and net zero emissions in 2070.</p>
IEA NPS	<p>The Stated Policies Scenario (STEPS2, former NPS), reflects the impact of energy-related policies that governments have already implemented, an assessment of the likely effects of announced policies, as expressed in official targets and plans, and the dynamic evolution of the cost of energy technologies, reflecting gains from deployment and learning-by-doing. Although Eni's scenario analysis is based on IEA SDS, the STEPS scenario is used as a benchmark in defining and measuring emission reduction trends of the Company's long term decarbonization strategy with respect to the goals of the Paris Agreements.</p>

### C3.1d

**(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>Risks: Current&amp;emerging regulation (Risk1, Risk2, Risk4)                      Opportunities: Development and/or expansion of low emission goods and services (Opp1 and Opp2); Development of new products or services through R&amp;D and innovation (Opp3, Opp5)                      Magnitude of impact: High</p>

		<p>The growing need of providing to the market low carbon products and services has materially impacted Eni's business. Eni defined operational strategies and objectives up to 2050, which outline the evolutionary and integrated path of the individual businesses through medium/long-term strategic guidelines, such as:</p> <ul style="list-style-type: none"> <li>- for Refining and Marketing, the progressive conversion of traditional Italian refining sites through new plants for production of hydrogen, methanol, biomethane and products from recycling of waste materials;</li> <li>- gradual evolution of product mix sold in retail outlets, reaching 100% decarbonised products by 2050;</li> <li>- progressive expansion of power capacity from renewables</li> <li>- focus on marketing of equity products: natural gas, bio-methane, blue energy and hydrogen;</li> <li>- progressive reduction of hydrocarbons production, with rising proportion of gas to oil;</li> <li>- projects to capture CO2 of over 10 million tons per year by 2050, with a first project under study for the Ravenna hub in Italy, where it will be possible to capture CO2 from neighbouring industrial sites and gas-powered electricity generation; renewables installed capacity exceeding 55 GW by 2050;</li> </ul> <p>In the last two years, 19 units of energy generation from renewable sources (photovoltaic and wind) have been finalized with an installed capacity of 190 MW and a wide geographical diversification: Italy, Algeria, Kazakhstan, Australia, Pakistan and Tunisia.</p> <p>In 2018, in Badamsha, Kazakhstan, Eni opened the construction site for the first wind farm, which will have an overall capacity of 48 MW. The installation, in the north-western region of Aktobe, represents the first large-scale investment in wind technology, and will produce 198 GWh annually for 25 years. Following an agreement recently signed through Eni's subsidiary ArmWind LLP, the Badamsha 1 wind farm will be joined by a second, Badamsha 2, also generating 48 MW. This will significantly increase the quantity of the country's energy sourced from wind, generating 200 GWh annually for 25 years. Eni started the commercial production of Badamsha 1 in March 2020.</p>
<p>Supply chain and/or value chain</p>	<p>Yes</p>	<p>Opportunities: Development/ expansion of low emission goods and services (Opp1)                  Magnitude of impact: High                  Eni intends to maximise the use of gas as a bridge fuel along all its value chain, particularly in electricity generation, and to</p>

		<p>promote its use in the transportation sector. Selling natural gas as LNG has a high impact on Eni's business and is crucial in order to optimise gas value. Given the significant investment required to build liquefaction and regassification plants, producers must sell the majority of the LNG they produce on long-term contracts (20 years) before the final investment decision (FID) can be taken. As an international gas and LNG (liquefied natural gas) operator, integrated with the Upstream sector, Eni is developing a new model to ensure it retains a leading position in the LNG market, both in Europe and in emerging economies. Eni has a global LNG portfolio based on long-term purchasing contracts with reliable suppliers, a network of relationships with end clients and traders all over the world. Over the next few years, the portfolio is expected to grow with forecast traded volumes of 14 MTPA to 2022 and up to 16 MTPA to 2025, almost twice as high as the traded volumes in 2018 (8.8 MTPA). By the end of 2022, more than 70% of traded volumes will come from Eni's equity production, mainly in Africa and East Asia, up from 56% in 2018.</p> <p>Examples on the climate related impact on our value chain are the agreements that Eni signed last years. The supply agreement signed by Eni with PT Pertamina (PERSERO) in June 2015. The agreement signed in October 2016 by Eni and its partners with BP to sell all the LNG produced by Coral South in Mozambique for 20-plus years, amounting to around 3.3 million tonnes per year of LNG</p> <p>To promote also the use of marginal land Eni launched an experimental program which began in Tunisia in 2018 for the cultivation of castor beans on pre-desert soils, unusable for food crops. This cultivation provides a biomass suitable for the Eni biorefineries and therefore for the production of biocomponents for diesel. Given the positive result of the experimentation, an assessment has begun for the start-up of wide-scale cultivation, which would make it possible to set up a more sustainable short supply chain for the Gela biorefinery. Last December a cooperation agreement was signed with the Tunisian company SNDP.</p>
Investment in R&D	Yes	<p>Opportunities: Development of new products or services through R&amp;D and innovation (Opp3 and Opp5), Development and/or expansion of low emission goods and services (Opp1 and Opp2)</p> <p>Magnitude of impact: High</p> <p>Technologies to capture and reduce GHG emissions as well as leaks of natural gas along the Oil and Gas value chain are</p>

		<p>fundamental for affirming the dominant role of gas in the global energy mix. On the other hand, technological development in the field of renewable energy production and storage and in the efficiency of electric vehicles could have impacts on the demand for hydrocarbons and therefore on the business. Low Carbon Research and Development is a key element for Eni's transformation into an integrated energy company. In 2019, Eni spent over US\$ 115 million on research and development for carbon neutrality. More than 53% of the total spending in planned research over the next 4 years is aimed at carbon neutrality and the circular economy (about US\$ 900 million)</p> <p>For example, in the R&amp;M segment, the two structurally non-competitive plants of Venice and Gela have been converted into modern bio-refineries with a refinery capacity of 1 million tonnes/year (expected to entry full operations by 2021). These refineries adopt the Ecofining proprietary technology for the production of diesel with a lower carbon content, with positive effects on the territories. In particular, Gela, started up in August 2019, is designed to treat advanced and unconventional feedstocks (second generation raw materials, such as used cooking oil and animal fat), to convert into biodiesel.</p>
<p>Operations</p>	<p>Yes</p>	<p>Risks: Policy and legal: Increased pricing of GHG emissions (Risk 2)                  Opportunities: Development of new products or services through R&amp;D and innovation (Opp3 and Opp5), Development and/or expansion of low emission goods and services (Opp1, Opp2), Resource substitutes/diversification (Opp5)                  Magnitude of impact: High</p> <p>One of the three pillars of the Eni's business model is "carbon neutrality in the long term" and this strategy will be pursued through a defined path that includes: (i) actions on energy mix and maximization of energy efficiency and reduction of direct emissions. These will include:</p> <ul style="list-style-type: none"> <li>-investments to reduce GHG emissions (that in the 2020-23 period will be US\$ 0.7 billion) and investments in renewable energy projects (in the next 4 years these investments will equal to US\$ 3.1 billion).</li> <li>-development of forest conservation, reforestation or afforestation projects to increase CO2 absorption capacity in the atmosphere, with positive effects on local communities. These projects will have an offsetting potential for 20 Mton/year of CO2 by 2030.</li> </ul>

		<p>-development of circular economy initiatives aiming at the valorisation of waste and biomass and the recovery of disused or reclaimed assets. Actions related with the development of circular economy initiatives will include investments in circular economy that in the next 4 years will equal to approximately US\$ 1.1 billion.</p> <p>To achieve maximum efficiency in the decarbonization process and find innovative solutions to facilitate the energy transition Eni is committed to the implementation of its scientific and technological research activities (R&amp;D) and an example is the % of spending in R&amp;D aimed at carbon neutrality and the circular economy (over the next 4 years it will be about US\$ 900 million and it will be more than 53% of the total spending in R&amp;D).</p>
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### C3.1e

**(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Access to capital	<p>In the future, Eni will have a stronger role as a global player in the world of energy that will be enhanced by the progressive development of the renewables business and by new businesses based on circularity. Low carbon products will cover a growing share of revenues in Eni in consequence of increasing investment on green business. Some examples of future activities are:</p> <ul style="list-style-type: none"> <li>• Refining &amp; Marketing: Expansion of biorefining capacity to over 5 million tonnes per year, supplied exclusively with sustainable feedstocks, from recycled and advanced carbon in target areas such as the Far and Middle East, Europe for the production of bio jet-fuel and the United States and progressive conversion of traditional Italian refining sites into new plants for production of hydrogen, methanol, biomethane and products from recycling of waste materials (like recycled carbon fuels).</li> <li>Eni objective is to reach 1 Mton of green-diesel production by 2021 and to increase by 2025 its bio-fuels installed capacity. In 2050 eni will reach 5 MTPA bio-fuels capacity, diversifying feedstocks to become Palm Oil free by 2023 and producing hydrogen, methanol, bio-methane and other products from waste. In 2050 100% of service station products will be blue, green and bio.</li> <li>• Renewables: Progressive expansion of installed global capacity to over 55GW by 2050 in selected areas linked to the presence of Eni customers</li> </ul>



		<p>and their growth so as to maximise the value of the integrated model and development activities in area where Eni already operates</p> <ul style="list-style-type: none"> <li>• Chemicals: Development and integration of chemicals from renewables and mechanical recycling, transformation via pyrolysis of non-recyclable plastics into polymers with identical characteristics to those produced with hydrocarbons and establishment of integrated platform to exploit synergies with refining in gasification processes involving all types of plasmix.</li> </ul> <p>With reference to bioproducts, the goal is to reach around 1 Mt/y production by 2035, where almost half of which from renewables, while by 2050 to exceed a 1Mt/y production of which more than 50% from renewables.</p> <p>As per Eni green business (renewables, green refineries and green chemistry), the expected regime revenues will be around US\$ 2 billion.</p> <p>As per Direct Costs, Eni is incurring in operating costs related to the participation in the European Emission Trading Scheme, whereby we need to purchase on the open markets' emission allowances in case our GHG emissions exceed a pre-set limit established at European level by regulations in force. In 2019 to comply with this carbon scheme, Eni purchased on the open market allowances corresponding to about 12 million tonnes, with a cost of about US\$ 330 million.</p> <p>As per Access to Capital, in 2019 the weighted-average cost of capital (WACC) to the Group increased marginally from 7.3% in 2018 to 7.4%. Based on our estimation, the cost of equity has significantly appreciated, driven by a sharp decline in government bond yields in 2019 that lifted the so-called equity risk premium, or the excess return for equities over a risk-free rate of return such as yields on treasuries of benchmark Countries like USA and Germany and a step-up in the equity risk premium applied by financial markets to the Oil &amp; Gas sector reflecting recent underperformance of the sector and uncertainties over future returns, considering the structural decline in hydrocarbons prices and the risks associated with the energy transition.</p>
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### C3.1f

**(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).**

The risk and opportunity management process connected with climate change is part of the Integrated Risk Management (IRM) Model, developed by Eni with the aim of supporting the management in the decision process by strengthening awareness of the risk profile and related mitigations. The IRM model ensures detection, consolidation and analysis of all of Eni's risks and aids the Board of Directors (BoD) in checking the compatibility of the risk profile with the strategic objectives, even in the medium-long term. The process is continuous and dynamic and provides for the following sub-processes: (i) risk governance, methods and tools, (ii) risk

strategy, (iii) integrated risk management, (iv) risk knowledge, training and communication. In particular, climate change is analysed, assessed and managed by considering 5 key drivers relating to both transition risks (market scenario, regulatory and technological development, reputational issues) and physical risks such as extreme or chronic weather events. The analysis is carried out using an integrated and cross-cutting approach, which involves specialist departments and business lines and enables an assessment of the risks and opportunities related to climate change. For example, the resilience of the investments' portfolio is measured through a monitoring process aiming at identifying and assessing the potential risks deriving from the market scenario and from legislative and technological evolution. To do so the profitability of the most important new investment projects is subjected to a sensitivity to carbon pricing.

## C4. Targets and performance

### C4.1

**(C4.1) Did you have an emissions target that was active in the reporting year?**

Both absolute and intensity targets

#### C4.1a

**(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.**

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**Target reference number**

Abs 1

**Year target was set**

2016

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 1

**Base year**

2014

**Covered emissions in base year (metric tons CO<sub>2</sub>e)**

5,327,942

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

12.42

**Target year**

2025

**Targeted reduction from base year (%)**

100

**Covered emissions in target year (metric tons CO<sub>2</sub>e) [auto-calculated]**

0

**Covered emissions in reporting year (metric tons CO<sub>2</sub>e)**

4,605,339

**% of target achieved [auto-calculated]**

13.5625162586

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Please explain (including target coverage)**

This target refers to Eni's commitment to eliminate routine gas flaring from upstream operated assets by 2025, five years in advance of the target year set by "Zero Routine Gas Flaring by 2030" Initiative launched by the World Bank Global Gas Flaring Reduction Partnership (GGFR), which Eni supports since 2003. Despite this target refers to 2014 as base-year, Eni has been strongly committed for many years to implement flaring down projects and has already reduced the total volume of flared gas by more than 70% since 2007.

**Target reference number**

Abs 2

**Year target was set**

2016

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 1

**Base year**

2014

**Covered emissions in base year (metric tons CO<sub>2</sub>e)**

2,894,206

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

6.75

**Target year**

2025

**Targeted reduction from base year (%)**

80

**Covered emissions in target year (metric tons CO<sub>2</sub>e) [auto-calculated]**

578,841.2

**Covered emissions in reporting year (metric tons CO<sub>2</sub>e)**

548,507

**% of target achieved [auto-calculated]**

101.3101261624

**Target status in reporting year**

Achieved

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Please explain (including target coverage)**

This target refers to Eni's commitment to reduce by 2025 fugitive methane emissions from upstream operated assets by 80% compared to the estimated 2014 value.

Although the target was already achieved in 2019, six year in advance of the 2025 target year, Eni will continue in the progressive implementation of periodical monitoring campaigns to identify fugitive methane emissions and implement maintenance and leakage elimination (Leak Detection and Repair campaigns - LDAR).

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**Target reference number**

Abs 3

**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s) (or Scope 3 category)**

Other, please specify

Scope 1, Scope 2 (Location based), Scope 3 related to all energy products sold (as better detailed under)

**Base year**

2018

**Covered emissions in base year (metric tons CO<sub>2</sub>e)**

537,000,000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

100

**Target year**

2035

**Targeted reduction from base year (%)**

28

**Covered emissions in target year (metric tons CO<sub>2</sub>e) [auto-calculated]**

386,640,000

**Covered emissions in reporting year (metric tons CO<sub>2</sub>e)**

533,000,000

**% of target achieved [auto-calculated]**

2.6602819899

**Target status in reporting year**

New

**Is this a science-based target?**

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

**Please explain (including target coverage)**

This target refers to Eni's new medium and long-term targets announced during the strategy presentation in February 2020. It is based on a distinctive methodology for the evaluation of all GHG emissions related to Eni's energy products along the value chain. The indicator used for this target (net GHG lifecycle emissions) is part of the new metrics defined by the methodology, which include Scope 1, 2 and 3 emissions, in absolute and relative terms, linked to the energy products sold accounted on an equity basis. This list of products includes: oil & gas, electricity and also new bio products originating from new circular economy business. For each of these products, the methodology envisages inclusion of all material sources of GHG emissions generated along their value chain, according to a well-to-wheel approach.

The official target was communicated during Strategy 2020 and represents absolute emissions reduction by 2035 of 30% at net of carbon sinks. In line with CDP guidance, the target reported in this section (-28% by 2035 versus 2018) represents an estimation of the Gross emissions reduction, obtained by subtracting the role of sinks.

**Target reference number**

Abs 4

**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s) (or Scope 3 category)**

Scope 1+2 (location-based) +3 (upstream &amp; downstream)

**Base year**

2018

**Covered emissions in base year (metric tons CO<sub>2</sub>e)**

537,000,000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

100

**Target year**

2050

**Targeted reduction from base year (%)**

71

**Covered emissions in target year (metric tons CO<sub>2</sub>e) [auto-calculated]**

155,730,000

**Covered emissions in reporting year (metric tons CO<sub>2</sub>e)**

533,000,000

**% of target achieved [auto-calculated]**

1.0491252918

**Target status in reporting year**

New

**Is this a science-based target?**

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

**Please explain (including target coverage)**

This target refers to Eni's new medium and long-term targets announced during the strategy presentation in February 2020. It is based on a distinctive methodology for the evaluation of all GHG emissions related to Eni's energy products along the value chain. The indicator used for this target (net GHG lifecycle emissions) is part of the new metrics defined by the methodology, which include Scope 1, 2 and 3 emissions, in absolute and relative terms, linked to the energy products sold accounted on an equity basis. This list of products includes: oil & gas, electricity and also new bio products originating from new circular economy business. For each of these products, the methodology envisages inclusion of all material sources of GHG emissions generated along their value chain, according to a well-to-wheel approach.

The official target was communicated during Strategy 2020 and represents absolute emissions reduction by 2050 of 80% at net of carbon sinks. In line with CDP guidance, the target reported in this section (-71% by 2050 versus 2018) represents an estimation

of the Gross emissions reduction, obtained by subtracting the role of sinks, according to published targets for CCS (>10MtCO<sub>2</sub>e by 2050) and Forestry (>30 MtCO<sub>2</sub>e by 2050). Even if the target is not yet approved by the Science Based Target Initiative (the methodology for Oil & Gas and Integrated Energy companies is still in development), we consider it a Science Based Target because it includes scope 3 and the reduction by 2050 exceeds the 70% threshold indicated by the IEA SDS scenario, that is compatible with the targets set by the Paris Agreement.

## C4.1b

**(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).**

### Target reference number

Int 1

### Year target was set

2016

### Target coverage

Business division

### Scope(s) (or Scope 3 category)

Scope 1

### Intensity metric

Other, please specify

Metric tons CO<sub>2</sub>e / kboe

### Base year

2014

### Intensity figure in base year (metric tons CO<sub>2</sub>e per unit of activity)

26.83

### % of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure

51.66

### Target year

2025

### Targeted reduction from base year (%)

43

### Intensity figure in target year (metric tons CO<sub>2</sub>e per unit of activity) [auto-calculated]

15.2931

**% change anticipated in absolute Scope 1+2 emissions**

0

**% change anticipated in absolute Scope 3 emissions**

0

**Intensity figure in reporting year (metric tons CO<sub>2</sub>e per unit of activity)**

19.58

**% of target achieved [auto-calculated]**

62.8418379287

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Please explain (including target coverage)**

This target refers to Eni's commitment to reduce by 43% the GHG emission intensity index associated with total gross operated hydrocarbon production in 2025 compared to 2014. The target refers only to Upstream emissions, that in 2014 covered 55.8% of total Eni's GHG direct emissions.

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**Target reference number**

Int 2

**Year target was set**

2016

**Target coverage**

Company-wide

**Scope(s) (or Scope 3 category)**

Scope 1+2 (location-based)

**Intensity metric**

Other, please specify  
Metric tons CO<sub>2</sub>eq / kboe

**Base year**

2014

**Intensity figure in base year (metric tons CO<sub>2</sub>e per unit of activity)**

41.27

**% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure**

98.5



**Target year**

2021

**Targeted reduction from base year (%)**

13.2

**Intensity figure in target year (metric tons CO<sub>2</sub>e per unit of activity) [auto-calculated]**

35.82236

**% change anticipated in absolute Scope 1+2 emissions**

0

**% change anticipated in absolute Scope 3 emissions**

0

**Intensity figure in reporting year (metric tons CO<sub>2</sub>e per unit of activity)**

31.41

**% of target achieved [auto-calculated]**

180.9958073588

**Target status in reporting year**

Achieved

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Please explain (including target coverage)**

Eni is committed to progressively improve the carbon efficiency index of its production by an average of 2% in the period 2014-2021, equivalent to an overall reduction of 13.2% in the period. The boundary includes scope 1 and scope 2 emissions coming from Upstream, Refinery, Chemical and Power business of Eni. The production is expressed in barrel of oil equivalent converting the energy production of each business through Eni's specific conversion factors. For the Refinery business, the figure throughput was used as a proxy of oil products. Although the target has already been achieved, Eni will continue to strive towards progressive improvement over the coming year.

**C4.2****(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Target(s) to reduce methane emissions

**C4.2b****(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.**

**Target reference number**

Oth 1

**Year target was set**

2016

**Target coverage**

Business division

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Methane reduction target

Other, please specify

Total fugitive methane emissions from Eni upstream operated assets

**Target denominator (intensity targets only)**

**Base year**

2014

**Figure or percentage in base year**

2,894,206

**Target year**

2025

**Figure or percentage in target year**

578,841.2

**Figure or percentage in reporting year**

548,507

**% of target achieved [auto-calculated]**

101.3101261624

**Target status in reporting year**

Achieved

**Is this target part of an emissions target?**

The target contributes to the reduction of 43% of the GHG performance index on total gross operated hydrocarbon production compared to 2014 (see C4.1b).

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain (including target coverage)**

This target refers to Eni's commitment to reduce fugitive methane emissions from upstream operated assets by 80% compared to the estimated 2014 value. Although the target was already achieved in 2019, six year in advance of the 2025 target year, Eni will continue in the progressive implementation of periodical monitoring campaigns to identify fugitive methane emissions and implement maintenance and leakage elimination (Leak Detection and Repair campaigns - LDAR).

## C4.3

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

### C4.3a

**(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO<sub>2</sub>e savings.**

	Number of initiatives	Total estimated annual CO <sub>2</sub> e savings in metric tonnes CO <sub>2</sub> e (only for rows marked *)
Under investigation	0	0
To be implemented*	68	5,774,132
Implementation commenced*	24	805,761
Implemented*	27	1,183,784
Not to be implemented	0	0

### C4.3b

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

#### Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Energy efficiency projects implemented in upstream activities

#### Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)

690,656

#### Scope(s)

Scope 1

#### Voluntary/Mandatory

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

962,176,626

**Investment required (unit currency – as specified in C0.4)**

23,069,304

**Payback period**

<1 year

**Estimated lifetime of the initiative**

11-15 years

**Comment**

projects ongoing in 15 affiliates involving the saving of 690.656 tCO<sub>2</sub>/y mostly 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.

**Initiative category & Initiative type**

Energy efficiency in production processes

Other, please specify

Energy efficiency projects implemented in refining activities

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

11,931

**Scope(s)**

Scope 1

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

1,383,755

**Investment required (unit currency – as specified in C0.4)**

2,283,185

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

4 projects involving the saving of 11931 tCO<sub>2</sub>/y mostly of direct emissions. Annual monetary savings were estimated assuming 300 €/toe for fuels and 50 €/MWh for electricity.

---

**Initiative category & Initiative type**

Energy efficiency in production processes

Other, please specify

Energy efficiency projects implemented in petrochemical activities

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

56,692

**Scope(s)**

Scope 1

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

4,937,643

**Investment required (unit currency – as specified in C0.4)**

4,360,329

**Payback period**

<1 year

**Estimated lifetime of the initiative**

11-15 years

**Comment**

4 projects involving the saving of 56.692 tCO<sub>2</sub>/y (about 15% related to scope 2 emissions). Annual monetary savings were estimated assuming 300 €/toe for fuels and 50 €/MWh for electricity.

---

**Initiative category & Initiative type**

Energy efficiency in production processes

Other, please specify

Energy efficiency projects implemented in power generation activities

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

2,192

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

315,222

**Investment required (unit currency – as specified in C0.4)**

1,448,064

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

4 projects involving the saving of 2192 tCO<sub>2</sub>/y of direct emissions. Annual monetary savings were estimated assuming 300 €/toe for fuels

---

**Initiative category & Initiative type**

Energy efficiency in buildings

Other, please specify

Energy efficiency projects implemented in retail, midstream sector, offices)

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

45

**Scope(s)**

Scope 1

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

7,900

**Investment required (unit currency – as specified in C0.4)**

123,090

**Payback period**

16-20 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

3 projects involving the saving of 45 tCO<sub>2</sub>/y emissions due mostly to electric consumptions (savings of 137MWh). Annual monetary savings were estimated assuming 300 €/toe for fuels and 50 €/MWh for electricity

---

**Initiative category & Initiative type**

Fugitive emissions reductions

Oil/natural gas methane leak capture/prevention

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

422,267

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

4,000,000

**Payback period**

&gt;25 years

**Estimated lifetime of the initiative**

1-2 years

**Comment**

LDAR (Leak Detection and Repair) monitoring campaigns are planned with an average frequency of 1-2 years at single asset. The investment figure refers to the annuals plan of campaigns. The Annual monetary saving associated with these initiatives is negligible since campaigns mostly highlighted that real natural gas leakages are very small compared to standard emission factors.

**C4.3c****(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Internal price on carbon	The return on the main investment projects is tested using a sensitivity to carbon pricing of 40 \$/ton CO <sub>2</sub> eq in actual terms in 2015, when the Final Investment Decisions (FID) is made and later during the six-monthly monitoring of projects
Dedicated budget for low-carbon product R&D	Research and Development is a key element for Eni's transformation into an integrated energy company for a low-carbon future and, in fact, the activities related to decarbonization account around 50% of the total research spending.
Dedicated budget for other emissions reduction activities	In the period 2020-2023 are planned investments to support the Upstream targets for emission reductions equal to more than US\$ 400 million.
Employee engagement	On 5 June, in connection with UN World Environment Day, Eni held its first Safety and Environment Day; dedicated entirely to the behaviour and action of the company and its people in the area of safety and environmental protection. To reward the operating areas that have produced excellent results in the

	areas of safety and the environment, from this year, Eni has added to its Safety Award a new Environment Award.
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## C4.5

**(C4.5) 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

## C4.5a

**(C4.5a) 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

Product

### Description of product/Group of products

Eni is involved in the production of biofuels, that if blended (up to 15%) with traditional fuels (mainly diesel), generate more sustainable fuels for transport sector, characterized by better environmental performance, significantly reducing pollutant and CO2 emissions.

Eni is developing technologies to convert conventional fossil-fuel refineries into bio-refineries to produce high-quality, cleaner fuels. The conventional refineries of Venice and Gela have been radically redesigned, incorporating innovative solutions and using environmentally and financially sustainable production methods. Such investments in in-house research have, in part, often led us to patent innovative and efficient solutions, which have contributed to our role as a key player in the process of energy transition focused on decarbonization. The two refineries ensure a refinery capacity of 1 million tonnes/year (expected to entry full operations by 2021).

### Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product

### Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Climate Bonds Taxonomy

### % revenue from low carbon product(s) in the reporting year

1.2

### Comment

The percentage is calculated considering the share of Eni Diesel + product on product sales in Refining & Marketing.



## C-EU4.6

**(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.**

## C-OG4.6

**(C-OG4.6) Describe your organization's efforts to reduce methane emissions from your activities.**

**Eni continues its commitment to optimizing its monitoring and reporting processes and reducing methane emissions from Upstream operated assets.** Methane emissions are essentially concentrated in the upstream value chain (64 ktonnes, equal to 97% of the Eni total) and are due to fugitive emissions, unburnt methane from flaring and process venting. As part of the **Oil and Gas Climate Initiative (OGCI) partnership, a collective target for reducing upstream methane intensity** (defined as the ratio of total methane emissions to net natural gas production) was announced in 2018 and envisages reaching a value of 0.25% by 2025. The reductions recorded so far have been achieved by implementing LDAR (Leak Detection and Repair) campaigns, which consist in carrying out on-site monitoring campaigns of plant components in order to identify and eliminate methane leaks by scheduling appropriate maintenance. It is possible to control almost entirely fugitive emissions enabling savings and improving safety in operations. To date, **89% of Eni upstream assets (based on production levels) are already covered by LDAR programs.**

To provide a concrete example of LDAR Application, our subsidiary in Congo achieved an absolute 85% reduction of fugitive methane emissions in 2018 vs 2014. In addition to the reduction due to the change of monitoring methodology (moving from an estimate based on literature emission factors to an estimate based on monitoring campaigns with infrared cameras), a relevant reduction is achievable through the maintenance on the leakers identified during the survey. In some cases, real reductions of over 80% have been achieved.

**Eni is also continuing its participation in the Climate and Clean Air Coalition (CCAC) Oil & Gas Methane Partnership**, a public-private partnership led by the UNEP, in which it develops appropriate plans to control methane emissions, based on the execution of monitoring campaigns and the assessment of mitigation opportunities.

## C-OG4.7

**(C-OG4.7) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from oil and gas production activities?**

Yes

## C-OG4.7a

**(C-OG4.7a) Describe the protocol through which methane leak detection and repair or other leak detection methods, are conducted for oil and gas production activities,**

**including predominant frequency of inspections, estimates of assets covered, and methodologies employed.**

LDAR programmes foresee campaigns to monitor the plant components in order to identify methane leaks and plan maintenance works. It is possible to control almost entirely fugitive emissions enabling product savings and improving safety in operations. An LDAR campaign is made up of three principal stages: Source Inventory, Monitoring and Maintenance:

**SOURCE INVENTORY**

- Analysis of the technical documentation (P&ID, process diagrams, activity parameters, etc.)
- Identification of potential sources
- Planning field activities

**MONITORING**

- On-site monitoring and identification of methane leaks. - The technology used – Optical Gas Imaging – requires the use of an infrared thermal camera to detect leaks

**MAINTENANCE**

- Immediate repair of leaks where possible
- Prioritization of works and definition of the annual maintenance plan
- Regular checks. Periodical checks are planned at least every two years but targeting annual monitoring.

**CASE STUDY:**

One of the first Countries where Eni implemented systematic fugitive emissions monitoring is Congo. Since 2017, both onshore and main offshore assets are surveyed. In particular, the M'Boundi onshore first campaign covered all the plant components (numbering over 6,200) that are potential leakers. The survey, carried out with OGI (Optical Gas Imaging) cameras, detected 40 leaks, over half of which were repaired immediately. As a result of this work, emissions were halved, and remaining interventions are planned compatibly with operating conditions and scheduled maintenance together with periodical checks carried out at list every two years.

## **C-OG4.8**

**(C-OG4.8) If flaring is relevant to your oil and gas production activities, describe your organization's efforts to reduce flaring, including any flaring reduction targets.**

For years, Eni has implemented programs to reduce gas sent to flaring, through an emphasis on the production of electricity for local populations, distribution for domestic consumption or export. Where these practices were not possible, Eni created re-injection systems in natural gas reservoirs. In 2014, after having consolidated a 75% reduction of volumes compared with 2007, most of the residual process flaring is today concentrated in Countries with difficult environments, such as Libya and Nigeria. Despite this, Eni confirms its commitment to zeroing volumes sent to process flaring by 2025, 5 years earlier than the timescale laid down by the Global Gas Flaring Reduction (GGFR) initiative promoted by the World Bank, of which Eni is a partner. To achieve this objective, an expenditure of US\$ 231 million has been budgeted for 2020-2023, to which further investment will be added in the 2024-2025 period.

In 2019, the volumes of hydrocarbons sent to process flaring, equal to 1.2 billion Sm<sup>3</sup>, decreased by 15% against 2018 and by 29% against 2014, in relation to the contribution of specific flaring down projects (Libya, Nigeria, Turkmenistan) and the decrease of production

that involved a few fields with associated gas flaring. In 2019, Eni invested US\$ 31 million in flaring down projects, in Libya and in Nigeria.

## C5. Emissions methodology

### C5.1

**(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

#### Scope 1

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**Base year start**

January 1, 2014

**Base year end**

December 31, 2014

**Base year emissions (metric tons CO<sub>2</sub>e)**

42,883,588

**Comment**

2014 is the reference base year for all current Eni's GHG reduction targets on operated assets.

#### Scope 2 (location-based)

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**Base year start**

January 1, 2014

**Base year end**

December 31, 2014

**Base year emissions (metric tons CO<sub>2</sub>e)**

687,553.5

**Comment**

2014 is the reference base year for Eni's GHG reduction target that includes scope 2.

#### Scope 2 (market-based)

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

## C5.2

### **(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

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

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011

ISO 14064-1

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

The Greenhouse Gas Protocol: Scope 2 Guidance

US EPA Center for Corporate Climate Leadership: Direct Emissions from Stationary Combustion Sources

US EPA Center for Corporate Climate Leadership: Direct Emissions from Mobile Combustion Sources

Other, please specify

## C5.2a

### **(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

In addition to reference selected in the question C5.2, the following reference are also considered:

- US Environmental Protection Agency (EPA), Protocol for Equipment Leak Emission Estimates;
- 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 (2018 Edition);
- Climate and Clean Air Coalition - Oil & Gas Methane Partnership Technical Guidance on core methane emissions sources;
- Specific internal procedures developed by Eni's business units that are not well represented in the recognized standards.

## C6. Emissions data

### C6.1

#### **(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO<sub>2</sub>e?**

**Reporting year**

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**Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

41,200,609

**Comment**

Overall, direct GHG emissions deriving from Eni operations in 2019 were 41.2 million tonnes CO<sub>2</sub>eq, decreasing 5% against 2018 and 29% against 2010. The reduction is due mainly to a drop in combustion and process emissions as a result of energy efficiency projects, and reduction of fugitive emissions and methane venting (the latter also due to more accurate estimates following the census and detailed survey of emissions sources). Emissions from flaring, despite the reduction in the volumes of gas sent for process flaring, increased by 3.7%, as a result of extraordinary maintenance performed on gas injection compressors (Nigeria and Congo), temporary shut-downs of plants in Libya and an increase in emergency flaring in Angola (start-up of the Agogo field), as well as depressurisation of lines in Nigeria following sabotage.

**C6.2****(C6.2) Describe your organization's approach to reporting Scope 2 emissions.****Row 1****Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

**Comment**

Currently, Eni is not able to collect information on electricity supply emission factors for a relevant part of its operations. Eni is working to collect all the necessary information for the next reporting cycles.

**C6.3****(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO<sub>2</sub>e?****Reporting year****Scope 2, location-based**

693,116

**Comment**

Indirect emissions from purchases of electricity, steam and heat from third parties (Scope 2) are quantitatively negligible in Eni (about 0.7 million tonnes CO<sub>2</sub>eq), since in most cases electricity generation takes place through its own installations and the related associated GHG emissions are recorded among direct emissions. Nonetheless,

Eni has included Scope 2 emissions within the scope of the target of improving carbon efficiency by 2% a year by 2021.

## C6.4

**(C6.4) 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

## C6.5

**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

### Purchased goods and services

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#### Evaluation status

Relevant, calculated

#### Metric tonnes CO<sub>2</sub>e

1,182,895

#### Emissions calculation methodology

This estimation is the results of EEIO (Environmentally-Extended Input-Output) analysis of purchased goods and services and GHG data collection of Oil & Gas drilling contractors, which operated for Eni in the reporting year. The EEIO analysis is composed by the following stages/steps: 1) procurement data collection and analysis; 2) procurement data classification by goods and services according to UN ISIC ver 3.1 2004; 3) calculation of 2019 spending vector 4) the 2019 spending vector is multiplied for the environmental satellite WIOD (World Input-Output Database) matrix; 5) the total GHG are split proportionally between 2019 spending for goods and services and capital goods. GHG data from drilling contractors (about 215 ktCO<sub>2</sub>eq in 2019) are calculated separately by using actual data of fuel consumption. Engines emissions are calculated based on API Compendium methodologies.

#### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

#### Please explain

Eni applies 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. 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.

## Capital goods

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### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

842,307

### Emissions calculation methodology

This estimation is the results of EEIO (Environmentally-Extended Input-Output) analysis of purchased goods and services and GHG data collection of Oil & Gas drilling contractors, which operated for Eni in the reporting year. The EEIO analysis is composed by the following stages/steps: 1) procurement data collection and analysis; 2) procurement data classification by goods and services according to UN ISIC ver 3.1 2004; 3) calculation of 2019 spending vector 4) the 2019 spending vector is multiplied for the environmental satellite WIOD (World Input-Output Database) matrix; 5) the total GHG are split proportionally between 2019 spending for goods and services and capital goods

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Eni applies 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. 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.

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

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### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

6,250,772

### Emissions calculation methodology

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 17.83 TWh). The following hypothesis have been made: It has been generated in Italy; It encompasses energy generated from either renewable sources or

fossil fuels. Average GHG Emissions factors for CO<sub>2</sub> published by IEA, and API Compendium 2009 for CH<sub>4</sub> and N<sub>2</sub>O have been used.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Please explain**

**Upstream transportation and distribution**

---

**Evaluation status**

Relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

1,624,258

**Emissions calculation methodology**

The figure refers to GHG emissions from road and maritime transportation and distribution of oil 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 (updated on March 2018). 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.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Please explain**

**Waste generated in operations**

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**Evaluation status**

Not relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

62,380

**Emissions calculation methodology**

Data on waste generated in Eni operations and disposed by third parties are recorded by Eni as: 1) Waste incinerated - at third party facilities; 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 (Department for Environment, Food and Rural Affairs, UK), 2016 Government GHG Conversion Factors for Company Reporting.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Please explain**

**Business travel**

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**Evaluation status**

Not relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

29,543

**Emissions calculation methodology**

The figure refers to GHG emissions estimated on business trips travelled by plane, car or train recorded by Eni's Business Travel Management Unit. In order to increase the accuracy of the GHG estimation, trip distances by plane are broken down into three categories: Trip Distance Long  $d > 2.300$  miles; Medium  $300 < d < 2300$  miles; Short  $d < 300$  miles.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Please explain**

Eni, in order to reduce environment impact from business travel, included GHG emissions, is encouraging videoconferencing system. Since 2005, Eni headquarters can rely on fixed videoconferencing systems in meeting rooms and smaller portable systems that have been installed video calls, integrated with the VoIP phone system, are also available.

**Employee commuting**

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**Evaluation status**

Not relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

201,027

**Emissions calculation methodology**

The estimation method has been set up on the following assumptions: 1) Every employee drives an average daily trip of 30 km (two ways), with a city car and typical city traffic; 2) Every employee works 220 days/year. These information allow to get the activity data (kilometres 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 (updated on March 2018).

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

#### **Please explain**

Several actions are in place with the purpose to reduce these emissions: the main is the institution of the Eni 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**

#### **Evaluation status**

Not relevant, explanation provided

#### **Please explain**

According to the IPIECA/API overview of methodologies for estimating Scope 3 emissions from Oil & Gas industry, 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 as Scope 1 and those from electric or other energy consumptions as Scope 2 emissions.

### **Downstream transportation and distribution**

#### **Evaluation status**

Not relevant, explanation provided

#### **Please explain**

Emissions related to transportation and distribution of products sold by Eni are accounted in the Scope 3 category "upstream transportation and distribution", because the transportation occurs before they are sold to final customers. Indeed, most of Eni's products are fuels, so when they are sold to final customers they are not transported or distributed. Moreover, this category is not expected to be material, also according to the

recent IPIECA/API overview of methodologies for estimating Scope 3 emissions from Oil & Gas Industry.

## Processing of sold products

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### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

11,825,598

### Emissions calculation methodology

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 CO<sub>2</sub> emissions from the natural gas supply chain", limited to Transmission, Storage and Distribution stages; and Exergia Consultancy "Study on actual GHG data for diesel, petrol, kerosene and natural gas".

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

### Please explain

## Use of sold products

---

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

232,589,885

### Emissions calculation methodology

GHG emissions from final use of Eni's sold products are estimated as all sold products would be burned in 2019. In order to set the activity data, IPIECA/API "net volume accounting" method has been used, considering the upstream net hydrocarbon production (equity based) 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 share. GHG emissions are estimated by multiplying the amount of single oil products (derived from crude oil) and natural gas, by the relevant average emission factor, using the same recognized for EU Emission Trading Scheme Regulation.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

### Please explain

As explained in the methodology box, the estimation is based on upstream net 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 would be about 220 million tonnes CO<sub>2</sub>eq.

## End of life treatment of sold products

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### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

185,662

### Emissions calculation methodology

Most of the Eni's sold products are fuels and so end of life associated emissions are not applicable. Therefore, the only products included in the emissions' category estimation are lubricants, asphalts and chemicals (handled as they would be plastics products). GHG emissions factors are taken from databases by Ecometrica and from the Sustainability Report of Italian National service for collection of exhausted lubricants.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

### Please explain

Regarding lubricants, the collection of exhausted lubricants is managed by a national service and its proper disposal can take place through re-refining, combustion or incineration methods. Furthermore, the consortium promotes public awareness initiatives, which encourage citizens to adopt a more eco-friendly conduct.

## Downstream leased assets

---

### Evaluation status

Not relevant, explanation provided

### Please explain

Emissions from this category are not expected to be material and relevant for the Oil & Gas industry. Eni doesn't account Scope 3 emissions related to facilities and buildings not owned and not operated by Eni. The reason 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 estimated the GHG emissions from the initiative Enjoy (a car sharing free floating with the objective of developing products and services for sustainable mobility), and they are not material.

## Franchises

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### Evaluation status

Not relevant, calculated

**Metric tonnes CO2e**

223,276

**Emissions calculation methodology**

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).

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

**Investments**

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**Evaluation status**

Not relevant, explanation provided

**Please explain**

Investment emissions are potentially material only for those companies with significant joint ventures that are not captured in their scope 1 and 2 inventory. In the case of Eni, GHG inventory is based on the operational approach and includes also 100% emissions of joint ventures investments in which Eni is the operator. This leads to an already conservative estimation because operated production is far higher than equity production.

**Other (upstream)**

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**Evaluation status**

**Please explain**

**Other (downstream)**

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**Evaluation status**

**Please explain**

**C6.7**

**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No

## C6.10

**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

### Intensity figure

0.000527

### Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)

41,893,725

### Metric denominator

unit total revenue

### Metric denominator: Unit total

79,565,920,000

### Scope 2 figure used

Location-based

### % change from previous year

8.7

### Direction of change

Increased

### Reason for change

As financial emissions intensity, we use the GHG Scope 1 and Scope 2 emissions per USD of company revenues (net sales from operations and other income and revenues). Eni's total revenues for 2019 were € 71.041 million (ref. Eni Fact Book 2019, page 88), equal to US\$ 79.566 million (exchange rate 1.12). This performance indicator has increased by 8.7% in 2019 respect to 2018, due to the reduction of the denominator determined by: i) a decreased price of oil barrel (Brent crude oil benchmark averaged 64 US\$/barrel, 9% lower than in 2018), that affects company's revenues; ii) a decreased exchange rate EUR/USD (1.18 in 2018), partially compensated by the reduction of numerator due to the implementation of emission reduction initiatives (flaring down projects and methane reduction campaigns) and improvement actions designed to increase energy efficiency, as described in detail in C4.3b and C7.9a.

## C-OG6.12

**(C-OG6.12) Provide the intensity figures for Scope 1 emissions (metric tons CO<sub>2</sub>e) per unit of hydrocarbon category.**

**Unit of hydrocarbon category (denominator)**

Other, please specify  
Thousand barrels of crude oil equivalent

**Metric tons CO<sub>2</sub>e from hydrocarbon category per unit specified**

19.58

**% change from previous year**

9

**Direction of change**

Decreased

**Reason for change**

The upstream GHG intensity index, expressed as the ratio between direct emissions in tonnes of CO<sub>2</sub>e and thousands of barrels of oil equivalent, in 2019 decreased by 9% in 2019 against 2018, reaching 19.58 tonnes CO<sub>2</sub>e/kboe. The overall reduction against 2014 is 27% and is in line with the target for 2025. The improvement in the index is linked to the increase in production from new low emissions intensity plants (e.g. Zohr in Egypt and OCTP in Ghana), to consolidation of the contribution from reduction of gas process flaring linked to projects launched during 2018, as well as completion of the campaigns to monitor fugitive methane emissions and planned leak maintenance in 2019. Additional details on emissions reduction initiatives are available in C4.3b and C7.9a.

**Comment****Unit of hydrocarbon category (denominator)**

Other, please specify  
Thousand tonnes of refinery throughput

**Metric tons CO<sub>2</sub>e from hydrocarbon category per unit specified**

248

**% change from previous year**

2

**Direction of change**

Decreased

**Reason for change**

Scope 1 - R&M Key Performance Indicator (GHG emissions/crude oil processing and semi-processed oil), expressed in terms of tCO<sub>2</sub> equivalent per thousand tonnes of refinery throughput. The figure includes CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O emissions. The reduction (2%) respect to 2018 (253 tCO<sub>2</sub>e/kton) reflects the effort of Eni for the implementation

of specific strategies to reduce greenhouse gas emissions and improvement actions designed to increase energy efficiency.

### Comment

## C-OG6.13

**(C-OG6.13) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.**

### Oil and gas business division

Upstream

**Estimated total methane emitted expressed as % of natural gas production or throughput at given division**

0.102

**Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division**

0.056

### Comment

The first figure refers to Upstream methane emissions vs marketed gas production, expressed as % volume (bcm/bcm). The second figure refers to Upstream methane emissions vs marketed hydrocarbons production. In this case, both numbers (numerator and denominator) are converted into barrel of oil equivalent, using internal conversion factors.

### Oil and gas business division

Chemicals

**Estimated total methane emitted expressed as % of natural gas production or throughput at given division**

0.006

**Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division**

0.006

### Comment

The figure refers to all methane emissions from petrochemical plants, divided by the amount of petrochemical products. The split between natural gas production and hydrocarbon production is not material



**Oil and gas business division**

Midstream  
Downstream

**Estimated total methane emitted expressed as % of natural gas production or throughput at given division**

0.009

**Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division**

0.001

**Comment**

The first figure (0.009%) refers to methane emissions associated with natural gas transported by Eni (on an operated basis). The second figure (0.001%) refers to overall methane emissions from oil refineries, vs throughput.

## C7. Emissions breakdowns

### C7.1

**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

### C7.1a

**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO <sub>2</sub> e)	GWP Reference
CO <sub>2</sub>	39,369,522	IPCC Fourth Assessment Report (AR4 - 100 year)
CH <sub>4</sub>	1,632,739	IPCC Fourth Assessment Report (AR4 - 100 year)
N <sub>2</sub> O	198.348	IPCC Fourth Assessment Report (AR4 - 100 year)

### C-EU7.1b

**(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.**

	Gross Scope 1 CO <sub>2</sub> emissions	Gross Scope 1 methane emissions	Gross Scope 1 SF <sub>6</sub> emissions	Total gross Scope 1 emissions	Comment

	(metric tons CO2)	(metric tons CH4)	(metric tons SF6)	(metric tons CO2e)	
Fugitives					
Combustion (Electric utilities)					
Combustion (Gas utilities)					
Combustion (Other)					
Emissions not elsewhere classified					

### C-OG7.1b

**(C-OG7.1b) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type.**

**Emissions category**

Combustion (excluding flaring)

**Value chain**

Upstream

**Product**

Unable to disaggregate

**Gross Scope 1 CO2 emissions (metric tons CO2)**

13,612,882

**Gross Scope 1 methane emissions (metric tons CH4)**

5,824

**Total gross Scope 1 emissions (metric tons CO2e)**

13,856,953

**Comment**

Emissions refer to all operated assets with oil and gas production. Total gross Scope 1 emissions (CO2e) include also N2O emissions.

**Emissions category**

Combustion (excluding flaring)

**Value chain**

Downstream

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

5,067,835

**Gross Scope 1 methane emissions (metric tons CH4)**

102

**Total gross Scope 1 emissions (metric tons CO2e)**

5,094,547

**Comment**

Emissions reported refer only to refining activities; emissions from petrochemical production are reported in another row. Total gross Scope 1 emissions (CO2e) include also N2O emissions.

**Emissions category**

Combustion (excluding flaring)

**Value chain**

Other (please specify)

Petrochemicals production

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

2,842,130

**Gross Scope 1 methane emissions (metric tons CH4)**

148

**Total gross Scope 1 emissions (metric tons CO2e)**

2,867,109

**Comment**

Emissions reported refer only to petrochemical production; emissions from refining activities are reported in another row. Total gross Scope 1 emissions (CO2e) include also N2O emissions.

**Emissions category**

**Value chain**

Other (please specify)

Power generation

**Product**

Unable to disaggregate

**Gross Scope 1 CO2 emissions (metric tons CO2)**

10,157,086

**Gross Scope 1 methane emissions (metric tons CH4)**

188

**Total gross Scope 1 emissions (metric tons CO2e)**

10,216,062

**Comment**

Emissions reported refer to power generation plants operated by Eni's subsidiary Enipower. Total gross Scope 1 emissions (CO2e) include also N2O emissions.

---

**Emissions category**

Flaring

**Value chain**

Upstream

**Product**

Unable to disaggregate

**Gross Scope 1 CO2 emissions (metric tons CO2)**

5,975,333

**Gross Scope 1 methane emissions (metric tons CH4)**

20,543

**Total gross Scope 1 emissions (metric tons CO2e)**

6,488,913

**Comment**

Total gross Scope 1 emissions (CO2e) slightly differ from the sum of CO2 and CH4 (converted with GWP = 25) due to the rounding of decimal places.

---

**Emissions category**

Venting

**Value chain**

Upstream

**Product**

Unable to disaggregate

**Gross Scope 1 CO2 emissions (metric tons CO2)**

1,477,522

**Gross Scope 1 methane emissions (metric tons CH4)**

15,291

**Total gross Scope 1 emissions (metric tons CO2e)**

1,859,799

**Comment**

Total gross Scope 1 emissions (CO2e) slightly differ from the sum of CO2 and CH4 (converted with GWP = 25) due to the rounding of decimal places.

---

**Emissions category**

Fugitives

**Value chain**

Upstream

**Product**

Unable to disaggregate

**Gross Scope 1 CO2 emissions (metric tons CO2)**

0

**Gross Scope 1 methane emissions (metric tons CH4)**

21,940

**Total gross Scope 1 emissions (metric tons CO2e)**

548,500

**Comment**

---

**Emissions category**

Fugitives

**Value chain**

Downstream

**Product**

Unable to disaggregate

**Gross Scope 1 CO2 emissions (metric tons CO2)**

0

**Gross Scope 1 methane emissions (metric tons CH4)**

23

**Total gross Scope 1 emissions (metric tons CO<sub>2</sub>e)**

580

**Comment**

Emissions reported refer only to refining activities; emissions from petrochemical production are reported in another row. Total gross Scope 1 emissions (CO<sub>2</sub>e) slightly differ from the sum of CO<sub>2</sub> and CH<sub>4</sub> (converted with GWP = 25) due to the rounding of decimal places.

**Emissions category**

Fugitives

**Value chain**

Other (please specify)  
Petrochemicals Production

**Product**

Unable to disaggregate

**Gross Scope 1 CO<sub>2</sub> emissions (metric tons CO<sub>2</sub>)**

0

**Gross Scope 1 methane emissions (metric tons CH<sub>4</sub>)**

188

**Total gross Scope 1 emissions (metric tons CO<sub>2</sub>e)**

4,710

**Comment**

Emissions reported refer only to petrochemical production; emissions from refining activities are reported in another row. Total gross Scope 1 emissions (CO<sub>2</sub>e) slightly differ from the sum of CO<sub>2</sub> and CH<sub>4</sub> (converted with GWP = 25) due to the rounding of decimal places.

**Emissions category**

Fugitives

**Value chain**

Midstream

**Product**

Gas

**Gross Scope 1 CO<sub>2</sub> emissions (metric tons CO<sub>2</sub>)**

0

**Gross Scope 1 methane emissions (metric tons CH<sub>4</sub>)**

205

**Total gross Scope 1 emissions (metric tons CO<sub>2</sub>e)**

5,125

**Comment**

Emissions reported refer to gas transportation and distribution operated activities.

---

**Emissions category**

Fugitives

**Value chain**

Other (please specify)

Power Generation

**Product**

Unable to disaggregate

**Gross Scope 1 CO<sub>2</sub> emissions (metric tons CO<sub>2</sub>)**

0

**Gross Scope 1 methane emissions (metric tons CH<sub>4</sub>)**

14

**Total gross Scope 1 emissions (metric tons CO<sub>2</sub>e)**

351

**Comment**

Emissions reported refer to power generation plants operated by Eni's subsidiary Enipower. Total gross Scope 1 emissions (CO<sub>2</sub>e) slightly differ from the sum of CO<sub>2</sub> and CH<sub>4</sub> (converted with GWP = 25) due to the rounding of decimal places.

---

**Emissions category**

Venting

**Value chain**

Midstream

**Product**

Gas

**Gross Scope 1 CO<sub>2</sub> emissions (metric tons CO<sub>2</sub>)**

0

**Gross Scope 1 methane emissions (metric tons CH<sub>4</sub>)**

812

**Total gross Scope 1 emissions (metric tons CO<sub>2</sub>e)**

20,300

**Comment**

Emissions reported refer to gas transportation and distribution operated activities.

**Emissions category**

Venting

**Value chain**

Other (please specify)

Power Generation

**Product**

Unable to disaggregate

**Gross Scope 1 CO2 emissions (metric tons CO2)**

0

**Gross Scope 1 methane emissions (metric tons CH4)**

28

**Total gross Scope 1 emissions (metric tons CO2e)**

700

**Comment**

Emissions reported refer to power generation plants operated by Eni's subsidiary Enipower

**C7.2**

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
Italy	18,703,580
Europe	1,218,125
Africa	18,437,185
Americas	671,948
Asia, Australasia	2,169,771

**C7.3**

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By business division

By facility

By activity



## C7.3a

**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO <sub>2</sub> e)
Exploration and Production	22,754,173
Gas and Power	10,469,276
Refining and Marketing and Chemicals	7,966,946
Other activities	10,214

## C7.3b

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO <sub>2</sub> e)	Latitude	Longitude
Enipower Bolgiano power plant	105,406	45.418631	9.284037
Enipower Brindisi power plant	2,552,877	40.628796	18.004071
Enipower Ferrera Erbognone power plant	2,451,557	45.099562	8.865494
Livorno Refinery power plant	528,554	43.582846	10.344003
Enipower Ravenna power plant	1,860,452	44.442163	12.237733
Enipower Ferrara power plant	1,530,614	44.864227	11.594317
Enipower Mantova power plant	1,649,394	45.15046	10.835494
Livorno Refinery	413,485	43.582846	10.344003
Sannazzaro Refinery	2,443,885	45.099562	8.865494
Taranto Refinery	905,913	40.489672	17.19311
Taranto Refinery power plant	323,164	40.489672	17.19311
Venezia Refinery	304,149	45.46131	12.269648
Gela Refinery	120,196	37.060975	14.277732
Versalis Brindisi plant	440,699	40.628796	18.004071
Versalis Ferrara plant	26,847	44.859662	11.59578
Versalis Mantova plant	187,484	45.145804	10.832987
Versalis Porto Marghera plant	652,245	45.445007	12.250774
Versalis Porto Torres plant	52,383	40.832826	8.378123
Versalis Priolo plant	742,689	37.162464	15.199051
Versalis Ragusa plant	16,686	36.907854	14.728829
Versalis Ravenna plant	31,779	44.442336	12.235117
Versalis Dunquerque plant	610,998	51.026147	2.243813

Versalis Grangemouth plant	57,858	56.004147	-3.677479
Barbara T1 platform	24,880	44.076476	13.78212
Barbara T2 platform	75,883	44.076476	13.78212
Cervia K platform	27,850	44.294722	12.639166
Casal Borsetti plant	42,280	44.555915	12.264303
Fano plant	36,283	43.808211	13.042845
Trecate plant	26,919	45.432963	8.783472
Val d'Agri plant	633,911	40.314292	15.898084
Crotone plant	47,176	39.105148	17.105979
Gela Enimed plant	20,695	37.066613	14.295542
Torrente Tona plant	105,141	41.741158	15.054249
Hewett plant	17,646	51.490693	0.150303
Goliat plant	283,591	58.889463	5.697797
RSI Sistema Rete Torce	1,935	44.442581	12.233768
LBOC - Point of Ayr Terminal	53,946	53.344974	-3.323073
LBOC - Douglas	161,862	53.344952	-3.323641
LBOC - Oil Storage Installation	4,511	53.344952	-3.323641
All other operated facilities	21,626,786	41.827065	12.47152

### C7.3c

**(C7.3c) Break down your total gross global Scope 1 emissions by business activity.**

Activity	Scope 1 emissions (metric tons CO <sub>2</sub> e)
Combustion and Process	32,271,640
Flaring	6,488,913
Non-combusted methane and fugitive emissions	559,266
Venting	1,880,791

### C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO<sub>2</sub>e.**

	Gross Scope 1 emissions, metric tons CO <sub>2</sub> e	Comment
Electric utility activities	10,227,320	
Oil and gas production activities (upstream)	22,754,173	

Oil and gas production activities (midstream)	252,170	
Oil and gas production activities (downstream)	7,966,946	

## C7.5

**(C7.5) Break down your total gross global Scope 2 emissions by country/region.**

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Italy	367,065		1,284,251	
Europe	117,197		615,443	
Africa	196,199		364,125	
Americas	1,718		4,775	
Asia, Australasia	10,937		11,036	

## C7.6

**(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

By business division

By facility

By activity

### C7.6a

**(C7.6a) Break down your total gross global Scope 2 emissions by business division.**

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Exploration and Production	229,466	
Gas and Power	18,649	
Refining and Marketing and Chemicals	362,968	
Other activities	82,033	

### C7.6b

**(C7.6b) Break down your total gross global Scope 2 emissions by business facility.**

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
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Versalis Priolo Plant	126,125	
Versalis Porto Marghera Plant	82,822	
Versalis Oberhausen Plant	59,494	
Versalis Dunquerke Plant	18,986	
Taranto Refinery	5,718	
Versalis Grangemouth Plant	15,873	
Versalis Szazhalombatta Plant	11,974	
Enipower Ravenna Plant	9,896	
Livorno Refinery	1,720	
Venice Refinery	8,877	
Versalis Sarroch Plant	2,459	
Enipower Brindisi Plant	2,497	
All other operated facilities	346,674	

## C7.6c

**(C7.6c) Break down your total gross global Scope 2 emissions by business activity.**

Activity	Scope 2, location-based (metric tons CO <sub>2</sub> e)	Scope 2, market-based (metric tons CO <sub>2</sub> e)
Oil and Gas Production activities	229,466	
Oil Refining	43,910	
Petrochemical Production	319,058	
Midstream and Other activities	100,682	

## C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

**(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO<sub>2</sub>e.**

	Scope 2, location-based, metric tons CO <sub>2</sub> e	Scope 2, market-based (if applicable), metric tons CO <sub>2</sub> e	Comment

Oil and gas production activities (upstream)	229,466		
Oil and gas production activities (midstream)	4,809		
Oil and gas production activities (downstream)	362,968		

## C7.9

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

### C7.9a

**(C7.9a) 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.**

	Change in emissions (metric tons CO <sub>2</sub> e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	The total Gross Scope 1 and Scope 2 emissions of Eni in 2018 were 44,018,462 tCO <sub>2</sub> e, compared to 41,893,725 tCO <sub>2</sub> e in 2019. The contribution to this reduction from renewable energy consumption is not quantifiable, therefore the reduction is 0% = $(0/44018462) * 100\%$ .
Other emissions reduction activities	1,477,252	Decreased	3.4	The total Gross Scope 1 and Scope 2 emissions of Eni in 2018 were 44,018,462 tCO <sub>2</sub> e, compared to 41,893,725 tCO <sub>2</sub> e in 2019. The overall reduction is of 4.8%, representing 2,124,737 tCO <sub>2</sub> e emissions. The contribution to this reduction from emission reduction activities is 1,477,252 tCO <sub>2</sub> e, related to energy efficiency projects and fugitives emissions monitoring campaigns implemented in 2019 (totalling 1,183,784 tCO <sub>2</sub> e, which are detailed in section C4.3b) + a contribution of 293,468 tCO <sub>2</sub> e related to flaring down projects implemented in II-IVQ 2018, which therefore gave their full year contribution on 2019.

				Therefore Eni performed a reduction of 3.4%= $((1183784+293468)/44018462)*100\%$ .
Divestment				
Acquisitions				
Mergers				
Change in output	647,485	Decreased	1.5	The total Gross Scope 1 and Scope 2 emissions of Eni in 2018 were 44,018,462 tCO <sub>2</sub> e, compared to 41,893,725 tCO <sub>2</sub> e in 2019. The overall reduction is of 4,8%, representing 2,124,737 tCO <sub>2</sub> e emissions. 647,485 of which are related to due to the decrease in the petrochemical production and in volumes of transported gas in the midstream sector. Therefore the reduction associated to a Change in output is 1.5%= $(647485/44018462)*100$
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

## C7.9b

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based

## C8. Energy

### C8.1

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

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

## C8.2

**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes

## C8.2a

**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	149,646,701.19	149,646,701.19
Consumption of purchased or acquired electricity		0	1,530,537	1,530,537
Consumption of purchased or acquired heat		0	2,622.83	2,622.83
Consumption of purchased or acquired steam		0	749,093	749,093
Consumption of purchased or acquired cooling		0	0	0

Consumption of self-generated non-fuel renewable energy		48,109		48,109
Total energy consumption		48,109	151,928,954.29	151,977,063.52

## C8.2b

**(C8.2b) Select the applications of your organization's consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

## C8.2c

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

### Fuels (excluding feedstocks)

Natural Gas

### Heating value

LHV (lower heating value)

### Total fuel MWh consumed by the organization

56,124,543

### MWh fuel consumed for self-generation of electricity

0

### MWh fuel consumed for self-generation of heat

4,170,895

### MWh fuel consumed for self-generation of steam

418,441



**MWh fuel consumed for self-cogeneration or self-trigeneration**

51,535,207

**Emission factor**

0.0021

**Unit**

metric tons CO<sub>2</sub>e per m<sup>3</sup>

**Emissions factor source**

EU-ETS Reg. 601/2012 / Monitoring and Reporting Guidelines and source specific emission factor based on the fuel composition

**Comment**

-

---

**Fuels (excluding feedstocks)**

Other, please specify  
Fuel Gas

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

62,202,527

**MWh fuel consumed for self-generation of electricity**

29,857,213

**MWh fuel consumed for self-generation of heat**

22,392,910

**MWh fuel consumed for self-generation of steam**

9,952,404

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

0.222

**Unit**

metric tons CO<sub>2</sub> per MWh

**Emissions factor source**

EU-ETS Reg. 601/2012 / Monitoring and Reporting Guidelines and source specific emission factor based on the fuel composition

**Comment**

-

---

**Fuels (excluding feedstocks)**

Refinery Gas

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

25,012,985

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

21,560,174

**MWh fuel consumed for self-generation of steam**

1,374,947

**MWh fuel consumed for self-cogeneration or self-trigeneration**

2,077,863

**Emission factor**

2.72

**Unit**

metric tons CO<sub>2</sub>e per metric ton

**Emissions factor source**

EU-ETS Reg. 601/2012 / Monitoring and Reporting Guidelines and source specific emission factor based on the fuel composition

**Comment**

-

---

**Fuels (excluding feedstocks)**

Liquefied Petroleum Gas (LPG)

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

923,397

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

889,911

**MWh fuel consumed for self-generation of steam**

33,486

**MWh fuel consumed for self-cogeneration or self-trigeneration**

**Emission factor**

3.026

**Unit**

metric tons CO2e per metric ton

**Emissions factor source**

EU-ETS Reg. 601/2012 / Monitoring and Reporting Guidelines

**Comment**

-

---

**Fuels (excluding feedstocks)**

Light Distillate

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

78,673

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

78,436

**MWh fuel consumed for self-generation of steam**

236

**MWh fuel consumed for self-cogeneration or self-trigeneration**

**Emission factor**

0.073

**Unit**

metric tons CO2e per GJ

**Emissions factor source**

API Compendium

**Comment**

-

---

**Fuels (excluding feedstocks)**

Diesel

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

3,415,389

**MWh fuel consumed for self-generation of electricity**

68,277

**MWh fuel consumed for self-generation of heat**

3,244,563

**MWh fuel consumed for self-generation of steam**

102,549

**MWh fuel consumed for self-cogeneration or self-trigeneration**

**Emission factor**

3.155

**Unit**

metric tons CO<sub>2</sub>e per metric ton

**Emissions factor source**

EU-ETS Reg. 601/2012 / Monitoring and Reporting Guidelines

**Comment**

-

---

**Fuels (excluding feedstocks)**

Fuel Oil Number 1

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

63,904

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

60,709

**MWh fuel consumed for self-generation of steam**

**MWh fuel consumed for self-cogeneration or self-trigeneration**

3,195

**Emission factor**

3.144

**Unit**

metric tons CO2 per metric ton

**Emissions factor source**

EU-ETS Reg. 601/2012 / Monitoring and Reporting Guidelines and source specific emission factor based on the fuel composition

**Comment**

-

---

**Fuels (excluding feedstocks)**

Fuel Oil Number 2

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

405,763

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

265,774

**MWh fuel consumed for self-generation of steam**

139,988

**MWh fuel consumed for self-cogeneration or self-trigeneration**

**Emission factor**

3.144

**Unit**

metric tons CO2e per metric ton

**Emissions factor source**

EU-ETS Reg. 601/2012 / Monitoring and Reporting Guidelines and source specific emission factor based on the fuel composition

**Comment**

-

---

**Fuels (excluding feedstocks)**

Jet Gasoline

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

14,259

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

14,259

**MWh fuel consumed for self-generation of steam**

**MWh fuel consumed for self-cogeneration or self-trigeneration**

**Emission factor**

0.07

**Unit**

metric tons CO<sub>2</sub>e per GJ

**Emissions factor source**

Api Compendium

**Comment**

-

---

**Fuels (excluding feedstocks)**

Kerosene

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

25,859

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

25,859

**MWh fuel consumed for self-generation of steam**

**MWh fuel consumed for self-cogeneration or self-trigeneration**

**Emission factor**

3.149

**Unit**

metric tons CO<sub>2</sub>e per metric ton

**Emissions factor source**

EU-ETS Reg. 601/2012 / Monitoring and Reporting Guidelines

**Comment**

-

---

**Fuels (excluding feedstocks)**

Petroleum Coke

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

1,049,914

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

1,049,914

**MWh fuel consumed for self-generation of steam**

**MWh fuel consumed for self-cogeneration or self-trigeneration**

**Emission factor**

3.425

**Unit**

metric tons CO<sub>2</sub>e per metric ton

**Emissions factor source**

EU-ETS Reg. 601/2012 / Monitoring and Reporting Guidelines

**Comment**

-

**Fuels (excluding feedstocks)**

Other, please specify

Minor contribution of other carriers recovered from processes

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

329,489

**MWh fuel consumed for self-generation of electricity****MWh fuel consumed for self-generation of heat**

329,489

**MWh fuel consumed for self-generation of steam****MWh fuel consumed for self-cogeneration or self-trigeneration****Emission factor**

0.074

**Unit**metric tons CO<sub>2</sub>e per GJ**Emissions factor source**

API Compendium 2009

**Comment**

-

**C8.2d**

**(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.**

	<b>Total Gross generation (MWh)</b>	<b>Generation that is consumed by the organization (MWh)</b>	<b>Gross generation from renewable sources (MWh)</b>	<b>Generation from renewable sources that is consumed by the organization (MWh)</b>
Electricity	67,523,789	48,670,286	66,913	48,109
Heat	54,082,893	54,076,825	0	0
Steam	28,106,932	26,628,953	0	0
Cooling	0	0	0	0



## C-EU8.2d

**(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.**

### Coal – hard

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

### Lignite

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

### Oil

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

## **Gas**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

## **Biomass**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

### **Waste (non-biomass)**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

### **Nuclear**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

### **Fossil-fuel plants fitted with CCS**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

**Geothermal**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

**Hydropower**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

**Wind**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO2e)**

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

**Comment**

**Solar**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO2e)**

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

**Comment**

**Marine**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO2e)**

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

**Comment**

**Other renewable**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

**Other non-renewable**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

**Total**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

## C-EU8.4

**(C-EU8.4) Does your electric utility organization have a transmission and distribution business?**

## C9. Additional metrics

### C9.1

**(C9.1) Provide any additional climate-related metrics relevant to your business.**

### C-OG9.2a

**(C-OG9.2a) Disclose your net liquid and gas hydrocarbon production (total of subsidiaries and equity-accounted entities).**

	<b>In-year net production</b>	<b>Comment</b>
Crude oil and condensate, million barrels	325.4	The figure includes natural gas liquids and is equity based.
Natural gas liquids, million barrels	0	Included in crude oil and condensate.
Oil sands, million barrels (includes bitumen and synthetic crude)	0	
Natural gas, billion cubic feet	1,934	The figure is equity based.

### C-OG9.2b

**(C-OG9.2b) Explain which listing requirements or other methodologies you use to report reserves data. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries, please explain this.**

Eni has adopted comprehensive classification criteria for the estimate of proved, proved developed and proved undeveloped Oil & Gas reserves in accordance with applicable U.S. Securities and Exchange Commission (SEC) regulations, as provided for in Regulation S-X, Rule 4-10. Proved Oil & Gas reserves are those quantities of liquids (including condensates and natural gas liquids) and natural gas which, by analysis of geoscience and engineering data,

can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, under existing economic conditions, operating methods, and government regulations prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain.

## C-OG9.2c

**(C-OG9.2c) Disclose your estimated total net reserves and resource base (million boe), including the total associated with subsidiaries and equity-accounted entities.**

	Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)	Comment
Row 1	12,286	14,808	26,905	All Figures are equity based. The figure of total resource base includes 3P and contingent resources.

## C-OG9.2d

**(C-OG9.2d) Provide an indicative percentage split for 2P, 3P reserves, and total resource base by hydrocarbon categories.**

	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Crude oil/ condensate/ natural gas liquids	49	50	48	
Natural gas	51	50	52	
Oil sands (includes bitumen and synthetic crude)	0	0	0	

## C-OG9.2e

**(C-OG9.2e) Provide an indicative percentage split for production, 1P, 2P, 3P reserves, and total resource base by development types.**

### Development type

Onshore

### In-year net production (%)

47

### Net proved reserves (1P) (%)



31

**Net proved + probable reserves (2P) (%)**

27

**Net proved + probable + possible reserves (3P) (%)**

26

**Net total resource base (%)**

23

**Comment**

Figures are equity based.

---

**Development type**

Shallow-water

**In-year net production (%)**

39

**Net proved reserves (1P) (%)**

59

**Net proved + probable reserves (2P) (%)**

59

**Net proved + probable + possible reserves (3P) (%)**

61

**Net total resource base (%)**

61

**Comment**

Figures are equity based.

---

**Development type**

Deepwater

**In-year net production (%)**

14

**Net proved reserves (1P) (%)**

10

**Net proved + probable reserves (2P) (%)**

14

**Net proved + probable + possible reserves (3P) (%)**

14

**Net total resource base (%)**

16

**Comment**

Figures are equity based.

**C-OG9.3a**

**(C-OG9.3a) Disclose your total refinery throughput capacity in the reporting year in thousand barrels per day.**

Total refinery throughput capacity (Thousand barrels per day)	
Capacity	732

**C-OG9.3b**

**(C-OG9.3b) Disclose feedstocks processed in the reporting year in million barrels per year.**

	Throughput (Million barrels)	Comment
Oil	165.98	Refinery throughputs on own account in Italy and outside Italy
Other feedstocks	2.27	Green Refinery throughputs
Total	168.25	Refinery throughput on own account in Italy and outside Italy and green refinery throughput.

**C-OG9.3c**

**(C-OG9.3c) Are you able to break down your refinery products and net production?**

Yes

**C-OG9.3d**

**(C-OG9.3d) Disclose your refinery products and net production in the reporting year in million barrels per year.**

Product produced	Refinery net production (Million barrels) *not including products used/consumed on site
Gasolines	42.33
Diesel fuels	64.3
Kerosenes	11.17
Fuel oils	15.11
Liquified petroleum gas	2.92
Lubricants	3.58

Other, please specify petrochemical feedstock & other	15.18
---	-------

### C-OG9.3e

(C-OG9.3e) Please disclose your chemicals production in the reporting year in thousand metric tons.

Product	Production, Thousand metric tons	Capacity, Thousand metric tons
High value chemicals (Steam cracking)	8,068	12,088

### C-EU9.5a

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
---------------------------------	---	--	------------------------	---------

### C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
-----------------------	--------------------------------	-----------------------------------	---	------------------------

### C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	The total R&D expenditure related to decarbonization in 2019 was US\$ 115 million.

## C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Other, please specify Unable to disaggregate according to CDP categories, please find details in the comment section.	Applied research and development	≤20%		Emission reduction R&D expenditure in 2019 was 37 M\$ Renewables R&D expenditure in 2019 was 27 M\$ Green chemistry R&D expenditure in 2019 was 16 M\$, Gas valorization R&D expenditure in 2019 was 16 M\$, Biorefineries R&D expenditure in 2019 was 9 M\$ Environment R&D expenditure in 2019 was 6 M\$ Energy efficiency R&D expenditure in 2019 was 4 M\$.

## C-OG9.7

(C-OG9.7) Disclose the breakeven price (US\$/BOE) required for cash neutrality during the reporting year, i.e. where cash flow from operations covers CAPEX and dividends paid/ share buybacks.

55

## C-OG9.8

(C-OG9.8) Is your organization involved in the sequestration of CO<sub>2</sub>?

No

## C10. Verification

### C10.1

**(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

### C10.1a

**(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.**

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/ section reference**

Figures: pages 8-9

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

### C10.1b

**(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.**

---

**Scope 2 approach**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/ section reference**

Figures: page 9

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

## C10.1c

**(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

---

**Scope 3 category**

Scope 3: Purchased goods and services

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 9

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

---

**Scope 3 category**

Scope 3: Capital goods

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 9

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

---

**Scope 3 category**

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 9

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

---

**Scope 3 category**

Scope 3: Upstream transportation and distribution

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 9

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

---

**Scope 3 category**

Scope 3: Waste generated in operations

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**



Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 9

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

---

**Scope 3 category**

Scope 3: Business travel

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 10

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

---

**Scope 3 category**

Scope 3: Employee commuting

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 10

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

---

**Scope 3 category**

Scope 3: Processing of sold products

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 10

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

---

**Scope 3 category**

Scope 3: Use of sold products

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 10

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

---

**Scope 3 category**

Scope 3: End-of-life treatment of sold products

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 10

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

**Scope 3 category**

Scope 3: Franchises

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Eni GHG Assurance Statement - 2019 (EN).pdf

**Page/section reference**

Figures: page 10

Assurance: pages 14-18

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

## C10.2

**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**



Yes

## C10.2a

**(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?**

 Eni GHG Assurance Statement - 2019 (EN).pdf

Disclosure module verification relates to	Data verified	Verification standard	Please explain

C6. Emissions data	Year on year emissions intensity figure	ISAE 3410	<p>Within the annual GHG Statement performed by our assurance provider, attached in CDP Climate Change and published in the Eni website, a specific assessment was done on year on year variations of emissions intensity. See pages 10-12</p> <p> <sup>1</sup></p>
C4. Targets and performance	Progress against emissions reduction target	ISAE 3410	<p>Within the annual GHG Statement performed by our assurance provider, attached in CDP Climate Change and published in the Eni website, a specific assessment was done on progresses against emissions reduction targets, namely:</p> <ul style="list-style-type: none"> <li>- Reduction of the Upstream emission intensity index of 43% by 2025 (- 38% by 2023) vs 2014;</li> <li>- Reduction of upstream fugitive emissions by 80% by 2025 vs. 2014;</li> <li>- Zero gas routine flaring by 2025;</li> <li>- Improvement of the carbon efficiency index (Operational Efficiency Index) by an average of 2% per year up to 2021 compared to 2014;</li> <li>- Reduction of Net GHG Lifecycle Emissions of 80% by 2050 vs 2018 (-30% by 2035);</li> <li>- Reduction of Net Carbon Intensity of 55% by 2050 vs 2018 (-15% by 2035).</li> </ul> <p>See page 10-12</p> <p> <sup>1</sup></p>

 <sup>1</sup>Eni GHG Assurance Statement - 2019 (EN).pdf

## C11. Carbon pricing

### C11.1

**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

Yes

#### C11.1a

**(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.**

EU ETS

#### C11.1b

**(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.**

## EU ETS

### % of Scope 1 emissions covered by the ETS

48

### % of Scope 2 emissions covered by the ETS

0

### Period start date

January 1, 2019

### Period end date

December 31, 2019

### Allowances allocated

7,729,709

### Allowances purchased

11,844,361

### Verified Scope 1 emissions in metric tons CO<sub>2</sub>e

1,929,047

### Verified Scope 2 emissions in metric tons CO<sub>2</sub>e

0

### Details of ownership

Facilities we own and operate

### Comment

## C11.1d

### (C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

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. Example on how we apply this strategy: Eni Trading & Shipping signed a Master Agreement (MA) with each of the Eni's Business Unit (BU) involved in the EU-ETS. The main aim of the MA (excl. the power sector) is to transfer to Eni Trading & Shipping the CO<sub>2</sub> price risk, while leaving the volume risk with the BUs. Therefore, the BUs will just pay a CO<sub>2</sub> price as close as possible to the average CO<sub>2</sub> price of the relevant year. On the other side, the power sector hedging strategy is based on the assessment of the Clean Spark Spread (CSS). A positive CSS will incentivize the Power Portfolio Unit to sell electricity and buy the corresponding free allowances, locking in the profit. Any kind of speculative trading, aiming at taking advantage of the CO<sub>2</sub> price fluctuation is executed by Eni Trading & Shipping and based

on the Eni Trading & Shipping vision on the market evolution. The central Climate Change Strategy and Positioning (CSS) department of Eni is responsible for aggregating the verified emissions data, providing emissions forecasts to Eni Trading and Shipping and managing the certification process. In addition to participating in the European Emission Trading system, from time to time, Eni evaluates the possibility to use carbon credits from the GHG reduction projects based on the Kyoto flexible mechanisms, in order to reduce the compliance cost. 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 political and regulatory developments.

## C11.2

**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

Yes

### C11.2a

**(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.**

#### **Credit origination or credit purchase**

Credit purchase

#### **Project type**

Forests

#### **Project identification**

ID-1775 (meth. VM009)

#### **Verified to which standard**

Other, please specify

VCS

#### **Number of credits (metric tonnes CO<sub>2</sub>e)**

2,150,000

#### **Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

2,150,000

#### **Credits cancelled**

No

#### **Purpose, e.g. compliance**

Voluntary Offsetting

**Credit origination or credit purchase**

Credit purchase

**Project type**

Wind

**Project identification**

CN4150

**Verified to which standard**

CDM (Clean Development Mechanism)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

178,000

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

178,000

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Wind

**Project identification**

CN3415

**Verified to which standard**

CDM (Clean Development Mechanism)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

500,000

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

500,000

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**



Credit purchase

**Project type**

Wind

**Project identification**

CN8074

**Verified to which standard**

CDM (Clean Development Mechanism)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

46,698

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

46,698

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Wind

**Project identification**

CN3415

**Verified to which standard**

CDM (Clean Development Mechanism)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

6,249

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

6,249

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

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**Credit origination or credit purchase**

Credit purchase

**Project type**

Wind

**Project identification**

CN574

**Verified to which standard**

CDM (Clean Development Mechanism)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

67,803

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

67,803

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

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**Credit origination or credit purchase**

Credit purchase

**Project type**

Wind

**Project identification**

CN5998

**Verified to which standard**

CDM (Clean Development Mechanism)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

41,753

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

41,753

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

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**Credit origination or credit purchase**

Credit purchase

**Project type**

Wind

**Project identification**

CN6179

**Verified to which standard**

CDM (Clean Development Mechanism)

**Number of credits (metric tonnes CO2e)**

186,494

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

186,494

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

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**Credit origination or credit purchase**

Credit purchase

**Project type**

Coal mine/bed CH4

**Project identification**

CN6928

**Verified to which standard**

CDM (Clean Development Mechanism)

**Number of credits (metric tonnes CO2e)**

5,000

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

5,000

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

## C11.3

**(C11.3) Does your organization use an internal price on carbon?**

Yes

## C11.3a

**(C11.3a) Provide details of how your organization uses an internal price on carbon.**

### Objective for implementing an internal carbon price

- Drive energy efficiency
- Drive low-carbon investment
- Stress test investments

### GHG Scope

Scope 1

### Application

To test the resilience of new projects, Eni assesses potential costs associated with GHG emissions when evaluating all new major capital projects before taking the final investment decision.

All major projects during their construction phase, are bi annually stress-tested and impacts on main KPI assessed (Internal Rate of Return, Net Present Value), against two sets of assumptions:

- i) a uniform cost per ton of carbon dioxide equivalent to the total emissions of each project;
- ii) the hydrocarbon prices and cost of CO<sub>2</sub> emissions adopted in the International Energy Agency (IEA) Sustainable Development Scenario (SDS). This stress test is performed both when the final investment decision is made and, on a regular basis, to monitor the progress of each project.

Furthermore, on an annual basis all Upstream cash generating units are stress-tested against the oil and CO<sub>2</sub> price assumptions of the IEA SDS scenario to verify the impacts on their fair value also under this stress test scenario.

### Actual price(s) used (Currency /metric ton)

40

### Variance of price(s) used

Eni carbon pricing is expressed in terms of 2015 Real Terms USD (40\$/tCO<sub>2</sub>eq) and is inflated by 2% on a yearly basis.

As per IEA SDS cost of CO<sub>2</sub>, the figures are updated on a yearly basis with the publication of IEA's World Energy Outlook

### Type of internal carbon price

Shadow price

### Impact & implication

The review performed at the end of 2019 indicated that the internal rates of return of Eni's ongoing projects in aggregate should not be substantially affected by a carbon pricing mechanism (-0.7 percentage points on internal return rates). Most of the projects

have GHG intensity targets that allow them under current assumptions to compete in a more CO2 regulated future.

## C12. Engagement

### C12.1

#### (C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

### C12.1a

#### (C12.1a) Provide details of your climate-related supplier engagement strategy.

##### Type of engagement

Compliance & onboarding

##### Details of engagement

Included climate change in supplier selection / management mechanism

##### % of suppliers by number

78

##### % total procurement spend (direct and indirect)

80

##### % of supplier-related Scope 3 emissions as reported in C6.5

##### Rationale for the coverage of your engagement

Suppliers' engagement on climate commitment is key for Eni. We are committed to selecting suppliers and external partners who recognize, accept and share the company's values. The selection of reliable partners is an essential process in order to create value for shareholders, all suppliers are subject to a qualification process that assesses also compliance with environmental requirements, defining appropriate action plans geared to the development and continuous improvement of suppliers' performances. During the qualification assessment all suppliers are required to report information on their "carbon management strategy" by means of a qualification questionnaire (which includes questions about GHG targets and reduction projects, Carbon Footprint, energy efficiency initiatives) as a part of a wider evaluation of their environmental management system. Should improvement areas emerge during the evaluation process, Eni requires the implementation of an improvement plan in order to overcome the shortcomings identified. After the given time for the implementation, suppliers send their improvement plans that are evaluated; in this way Eni ensures a list

of selected and qualified supplies, eligible for participating in tenders. The percentages are calculated with respect to the total number of suppliers subject to qualification assessment about Environmental aspects carried out by Eni Spa in 2019; these percentages are strictly related to the riskiness (driven by HSE criticality) of the qualification processes performed in the year, according to the procurement needs requested.

Eni is carrying out many actions to involve its value chain on climate-related issues. For example, in 2019-2020 Eni launched the JUST programme to enforce the commitment of the company towards a Just Energy Transition and Decarbonization. The programme aims at deepening knowledge and engagement of suppliers on environmental, social and economic issues. To address these topics, we developed a matrix that links the three macro-areas addressed with specific issues such as GHG Emission, Energy Efficiency and Renewables. To strengthen the impact of this initiative Eni's procurement updated the supplier's portal in order to reach the highest number of suppliers. Such initiative will allow analysis of companies' behaviors and ongoing trends to support an ever more sustainable supply chain.

### **Impact of engagement, including measures of success**

As measure of success, beyond the qualification assessment, Eni performs a continuous monitoring on overall supplier's performances, including environmental aspects too. Eni collects information and feedback from contract holders and procurement units and analyses them in order to detect if a deeper evaluation, such as an onsite audit, is required. By this approach, aimed at developing its suppliers, Eni has experienced an enhancement in suppliers' performances and an improvement in the contractual relationship with them. Should negative feedback be issued, such as for example related to waste disposal problems, it would lead to the termination of the relations with Eni on an ongoing basis. This approach of constant monitoring ensures the success of engagement with 100% of Eni's suppliers which are certainly responding to our requirements.

Regarding the collection of climate change and carbon information, all the suppliers will be demanded to complete a self-assessment questionnaire on the Eni portal. The output will be that, if they are performing well, they will receive a tag to highlight their good environmental performance. Such tag of good performances will be taken into consideration at all the phases of the procurement process and will be used to monitor implemented best practices and to provide a snapshot of how different market segments are evolving.

### **Comment**

The qualification assessment on Environmental Management system includes evaluation on environmental management procedures and organization, environmental context analysis, waste management (register, management, transportation and temporary storage), air and water authorization emissions list and environmental specific training. In case of the evaluation brings out that the supplier doesn't meet Eni's environmental requirements, Eni requires the implementation of an improvement plan, such as suppliers are requested to improve waste management and tracking, to install plant improvements in order to monitor quantity or quality of water and wastes emissions during operations, to implement procedures and training related to waste

management and disposal and to develop their vendor management system in order to promote environmental engagement.

Besides Eni launched Agorà, a virtual square in Eni supplier portal, with the aim to promote dialogue, discussion, collecting and sharing of positive examples related to social, economic social or environmental sustainability projects, in the collaboration between Eni and its current and perspective suppliers, to pursue objectives and seize opportunities for a common development. The stories collected in the virtual space Agorà with the greatest potential for a common change of pace in the energy transition path will be published on our suppliers' portal, these will become a basis for discussion and development promoted by Eni towards all the stakeholders in the supply chain.

### **Type of engagement**

Engagement & incentivization (changing supplier behavior)

### **Details of engagement**

Run an engagement campaign to educate suppliers about climate change

### **% of suppliers by number**

100

### **% total procurement spend (direct and indirect)**

100

### **% of supplier-related Scope 3 emissions as reported in C6.5**

### **Rationale for the coverage of your engagement**

In order to enforce the commitment of the company towards a Just Energy Transition and Decarbonization and engage the entire supply chain in this path, in 2019-2020 Eni launched the JUST (Join Us in a Sustainable Transition) programme and developed a new collaboration and communication platform named EniSpace. The JUST programme is finalised to raise an integrated approach toward sustainability introducing sustainability requirements in each procurement phase (being Market Intelligence, Vendor Management and Tender), including self-production or acquisition of energy produced with renewables, monitoring and control of GHG emissions, circularity, innovation, transparency and ethics, to be aware of Eni requirements from its suppliers and the market.

One of the steps of engagement, promoted in the JUST programme and spread to supply network through EniSpace, is the Code of Conduct. Having tested in 2019 the market reaction to the introduction of a new Supplier Code of Conduct, Eni has finalized its strategy for the distribution of the Code of Conduct connected with the Code of Ethics. The Code states Eni's commitment and expectations from suppliers regarding the management and monitoring of the most significant environmental aspects and the integration, whenever possible, of sustainable environmental principles into their supply chain management (between them, the optimization of energy use and the reduction of emissions to air). Suppliers are required to commit to actively participating in the process of risk assessment and environmental protection, in line with the principles of

precaution, prevention, protection and continuous improvement and contribute in the achievement of company targets regarding the efficiency of plants and reduction of direct emissions, the promotion of a low-carbon impact energy mix and a steady effort in research and development.

### **Impact of engagement, including measures of success**

EniSpace is the new tool Eni introduced to strengthen the impact of the JUST programme and engage and reach the highest number of suppliers. It has been designed to engage the supply chain on the ESG aspects and to develop Eni industrial ecosystem towards these directions. It has 3 channels: "JUST program" to communicate goals, tools, news, etc, "Innovation Match", an Open Innovation areas to stimulate current and prospective suppliers in idea development and new technologies, "Agorà", a collaboration space where to share best practice and to find collaboration opportunities across the supply network.

In addition, on the JUST channel, suppliers are invited to read and embrace the principles declined in the Code of Conduct. By requiring the suppliers to commit to the principles of the Code of Conduct, Eni wants to build a long-term relationship with them. The success of the engagement is measured with the introduction of sustainability requirements in every procurement phase (as explained before). Requirements can be qualitative and quantitative questions (availability of environmental certifications/initiatives for reducing GHG emission/percentage of energy from renewables in the energy mix) or targets (15% reduction in the carbon footprint by 2021). These are meant to verify the compliance of suppliers to the principles stated and to incentivize the adoption of better practices. To do so the JUST programme will introduce sustainability tags and bonuses for those who are already in line with expectations, while if they are not, by asking them deeper information on the matter they'll become aware of their gaps and open courses will be shared on the suppliers' portal to give some hint on the best practices on the market.

Eni's objective is to select those tenders with the highest potential for the reduction of climate impact and to develop sourcing strategies to improve the environmental footprint of the related operations.

We are now measuring the baseline of our supply chain's maturity, in the next years we'll be able to quantify the improvements. The main beneficial outcomes are that it assures the suppliers compliance to Eni's requirements and, by asking something more detailed to the suppliers every time they have contact with us, Eni and its supplier learn something new about each other and are challenged to keep doing better and grow together.

### **Comment**

The scope of Eni Supplier Code of Conduct is to develop a relationship with suppliers of proven professionalism, capable of operating according to the highest quality standards and who share its corporate values, including those related to sustainable development. In order to guarantee the correct application of the code Eni constantly monitors the respect of principles included in the Code and can verify the truthfulness of the supplier's commitment in order to assess its real engagement.

To reward those suppliers who are already mature, several levers are deployed to affect the outcome of the tender process such as selecting the vendors with the required HSE



certifications, setting minimum requirements to be complied with in terms of environmental performance of goods and services rendered and valuing with a premium features and characteristics that may have a positive contribution to the overall HSE performance. In selected fields where the potential is greatest, Eni awards contracts to those suppliers that meet the required standards and are bound to contracts that expect superior environmental performance. At Eni we value services that are rendered minimizing co2 emissions for example by assigning a premium to those vendors that are able to reduce the distance travelled to procure goods, that use reusable products, that implement policies to reduce direct emissions and are efficient in the use of resources.

## C12.1b

**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

### **Type of engagement**

Education/information sharing

### **Details of engagement**

Run an engagement campaign to education customers about your climate change performance and strategy

### **% of customers by number**

100

### **% of customer - related Scope 3 emissions as reported in C6.5**

### **Please explain the rationale for selecting this group of customers and scope of engagement**

On June 2019 Eni launched "Eni + 1", a new campaign to educate and promote the principles of energy transition. "Eni + 1" is a multi-subject advertising campaign with an integrated media mix, which has addressed the Italian public opinion (therefore not only Eni customers) and aims to raise awareness of the importance of responsible behavior by companies and individuals, collaborating together to tackle climate change. The campaign, in fact, represents virtuous daily behaviors to be adopted (such as recycling plastic, using the car less, repairing objects instead of buying others) and Eni's best low carbon technologies (co2 biofixation with microalgae, biofuels from frying oils, wave energy production). All these messages are in line with Eni's business model and the key features of the new long-term industrial plan.

### **Impact of engagement, including measures of success**

In order to measure the success of the campaign, a research was carried out with a third-party provider that as proved the following:

- among those who have seen and remember the campaign Eni's image profile has improved (up to +15% compared to those who have not seen it). In addition, 59% of respondents said they have a better opinion of Eni after seeing the campaign;

- the messages shared by the campaign were clear and interesting, credible and convincing. Those interviewed who remember / recognize the campaign said that this type of advertising communication is suitable for an innovative, reliable and responsible company.
- the campaign has reached more than 50 million people (potential media target).

## C12.1d

**(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

Eni launched in 2019 the training programme JOULE, designed for future entrepreneurs, to promote a culture founded on the values of integration, sustainable growth and development of informed leadership. This project aims to be a trigger for relaunching businesses in Italy and for developing innovative, sustainable start-up companies. Joule will see Eni share the goals the company has made its own over the last years with the business players of the future, including: a commitment to researching solutions for the transition to an energy model with a low carbon impact; the fundamental role of renewable energy and the circular economy; providing access to energy and contributing to use of sustainable energy resources for local development in countries through investment, skills and technology. Eni will provide 25 scholarships to aspiring entrepreneurs, who want to grow and contribute to Italy's sustainable growth, giving them tools, knowledge, skills and keys to understand business.

As part of the program, Energizer is Joule's business accelerator and an observatory providing concrete support for developing business with a low carbon impact, promoting incubation programmes, accelerating start-ups and small and medium enterprises, and providing methodological, logistical and financial support.

One of the project's goals is to allow monitoring of accelerated initiatives, using specific performance indicators for environmental sustainability and making models, alongside the start-ups, to measure the impact of business in the medium-to-long term.

The first acceleration initiative involves two strategic partnerships. One is with the co-innovation programme Open Italy, promoted by the Elis consortium (a not for profit entity focused on youth, professionals and enterprises, which contributes to the sustainable development of startups) and joined by 50 corporate, 80 acceleration providers and more than 300 start-ups.

The second agreement is with PoliHub, the incubator of the Politecnico di Milano, run by the University's Foundation, recently placed in the world's top five of university incubators (UBI Index 2019-2020) and able to accelerate many innovative technologies, also thanks to its important alliances with some of the best European universities.

## C12.3

**(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

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

## C12.3a

### (C12.3a) 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, included the recent launch of the European Green Deal.	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 supported the structural reform of the EU-ETS for the IV phase, aiming at giving a strong price signal for low carbon investments and establishing a clear framework regarding free allocation for industrial installations facing carbon leakage risk. Lastly, in the context of the European Green Deal, Eni supports the extension of the scope of the ETS to other sectors and the increasing of the GHG reduction ambition by 2030 in order to reach the carbon neutrality by 2050, provided that adequate policy tools are defined to safeguards the EU industry competitiveness.
Clean energy generation	Support with minor exceptions	Eni has actively participated in the CCS Advisory Group (CAG) to support the UK policymakers to develop a comprehensive legislation capable of deploying the CCS technology, along all the value chain in UK.	According to the IPCC, CCS is a key technology to achieve the targets of the Paris Agreement. Along with other members of the CAG, Eni has proposed a detailed Regulatory & Policy framework to deploy the CCS at commercial scale in UK.
Climate finance	Support with minor exceptions	Eni participated in the public consultation about the State Aid Guidelines review for the indirect cost compensation in phase 4 of the EU ETS, launched by the European Commission to address the risk of carbon leakage due to indirect emissions costs.	In the public consultation, Eni suggested the importance to include in the compensation rules all sectors exposed to the carbon leakage due to indirect cost of the EU ETS and have obligation for each single EU Member State (MS) to issue the compensation, in order to avoid market distortions both among sectors and between different MSs. Eni also indicated

			technical details to improve the calculation of the compensation.
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## C12.3b

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

## C12.3c

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

### Trade association

IPIECA

### Is your position on climate change consistent with theirs?

Consistent

### Please explain the trade association's position

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. Since the Paris Agreement was made in December 2015, IPIECA has continued to work on the topic of low-emissions pathways, holding a workshop for members exploring technologies and perspectives on low emissions futures and holding a series of webinars on carbon pricing. Moreover, Eni has chaired the organization of a workshop on Carbon Offset with IPIECA's members and external experts. The workshop has been focused on several aspects, exploring regulatory updates, certification standards, governments approaches, market trends, corporate strategies, as well as the point of view of UN bodies and environmental NGOs.

### How have you influenced, or are you attempting to influence their position?

Eni's Head of Climate Change Strategy and Positioning is the Executive Committee Champion of the Climate Change group of IPIECA. Eni's Head of Climate Policy is Vice Chair of the Climate Change Group of IPIECA and Chair of the taskforce on Carbon Offset. Furthermore, Eni takes actively part in most of the other taskforces of the Climate Change group of IPIECA: Low Emission Pathways, Hydrogen, Aviation GHGs, COP26.

### Trade association

IETA

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

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. IETA periodically holds workshop and carries out position papers on relevant topics submitted to the relevant policymakers (e.g. national coal phase out policies). In particular, IETA is monitoring and influencing the developments of EU ETS Phase 4 implementation rules (e.g. dynamic allocation) to secure industrial competitiveness and the functionality of the market. IETA is also currently following within the EU Working Group the evolution of the European debate on increasing the GHG reduction ambition by 2030 and the carbon neutrality by 2050. On the other hand, the International Working Group is engaged in the UN talks around article 6 of the Paris Agreement.

**How have you influenced, or are you attempting to influence their position?**

Eni has been member of IETA for many years and participates in the EU and International Working Groups activities.

**C12.3d****(C12.3d) Do you publicly disclose a list of all research organizations that you fund?**

Yes

**C12.3e****(C12.3e) Provide details of the other engagement activities that you undertake.**

**Eni is among the five companies that in 2015 founded the Oil and Gas Climate Initiative (OGCI), a voluntary CEO-led initiative, whose mission is to be the catalyst of actions and investments to mitigate GHG emissions from the Oil & Gas sector and explore new business and new technologies.** OGCI is investing up to US\$ 1 billion in 10 years in low carbon technologies, through the OGCI Climate Investment (OGCI CI) vehicle. These are additional investments compared to the commitments of the individual companies and a multiplier effect is expected thanks to the development of low carbon technologies.

In July 2020, OGCI announced a target to reduce the collective average carbon intensity of member companies' aggregated upstream oil and gas operations to between 20 kg and 21 kg CO<sub>2</sub>e/boe by 2025, from a collective baseline of 23 kg CO<sub>2</sub>e/boe in 2017. The range is consistent with the reduction needed across the oil and gas industry by 2025 to support the Paris Agreement goals. The target represents a reduction of between 36 and 52 million tonnes

of CO<sub>2</sub>e per year by 2025 (assuming constant levels of marketed oil and gas production), equivalent to the CO<sub>2</sub> emissions from energy use in between 4 and 6 million homes.

In 2019 OGCI launched a new initiative to unlock large-scale investment in carbon capture, use and storage (CCUS), a crucial tool to achieve net zero emissions. OGCI's CCUS KickStarter initiative is designed to help decarbonize multiple industrial hubs around the world, starting with hubs in the US, UK, Norway, the Netherlands, and China. The aim of the KickStarter is to create the necessary conditions to facilitate a commercially viable, safe and environmentally responsible CCUS industry, with an early aspiration to double the amount of carbon dioxide that is currently stored globally before 2030.

In 2018 OGCI set a target for reducing methane emissions to enhance the role of natural gas. Eni has also been a forerunner in joining the initiative Global Gas Flaring Reduction for the progressive elimination of flaring gas and the Climate and Clean Air Coalition - Oil & Gas Methane Partnership aimed at reducing methane emissions in the Oil & Gas sector.

Moreover, **Eni is the only company among the Peers to be part of the Task Force on Climate-related Financial Disclosures (TCFD)**, which in 2017 published voluntary recommendations to encourage disclosure of the financial implications of climate change.

## C12.3f

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

**Eni recognizes the need for a clear and coherent position on all climate related issues and has set up a strong process in order to ensure that all direct and indirect activities that influence policy are consistent with the overall climate change strategy. This means clear company positioning on climate policy topics as well as robust internal guidelines for a responsible engagement within business associations.**

Eni takes part in several business associations at domestic and international level. The membership and participation in these organisations allows Eni to:

- develop, share and promote best practices and standards with our peers;
- contribute to drafting advocacy positions on climate policies and regulations;
- identify new approaches to meet the stakeholders' expectations;
- participate in collective sectorial actions for climate mitigation and energy transition .

The main topics Eni considers essential in the climate-related advocacy, in line with Long-Term Strategy are:

- support the goals of the Paris Agreement;
- identify the role of natural gas in the energy mix;
- back carbon pricing mechanisms;
- embrace increasing energy efficiency and low carbon technologies;
- support the role of a natural climate solutions;
- support climate transparency and disclosure.

When Eni becomes a member of a business association, our representatives are committed to be active and influential in any internal debates that might be relevant for climate and business strategies. We share our vision with other members and always strive to drive the discussion in accordance with our principles. We respect the viewpoints of other members and always comply with any relevant antitrust and competition laws. Sometimes a particular position a

business association may take is a compromise between the different, yet legitimate, views of its members. As such, Eni's position cannot always be fully reflected in any final outcome documents.

Although Eni already has an internal process of annual review of memberships, further investigations may be needed. To achieve this, a task force led by Eni's department in charge of climate strategy and positioning undertakes a periodic assessment of the consistency between the various positions of business associations and any subsequent campaigns, on one side, and Eni's vision, on the other. If the assessment believes that the views of any organisations that we join to contradicted any aspect of Eni's climate strategy, we will disassociate ourselves from said views and any associated campaigns. Furthermore, if these views contradict any of the main principles of our climate strategy, Eni will seriously consider withdrawing from the association. The results of this assessment are presented to the Board of Directors and publicly disclosed.

**In February 2020 Eni has published the principles that it uses to define its position on climate change themes together with the first assessment of its participation in business associations in light of their alignment with these principles.**

## C12.4

**(C12.4) 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

In voluntary sustainability report

### Status

Complete

### Attach the document

 Eni-for-2019-Carbon-neutrality-in-the-long-term.pdf

### Page/Section reference

All report is dedicated to decarbonization. In detail:

Governance: pag. 6-9

Strategy: pag. 14-20, includes the description of Eni's new value chain approach at pag. 18-20

Risk & opportunities: pag. 10-13

Emission figures: pag. 45-50

Emission Targets: pag 14-15 and pag. 44

### Content elements

Governance

Strategy

Risks & opportunities

Emissions figures  
Emission targets

### **Comment**

The document is organised based on the Task Force on Climate-related Financial Disclosures recommendations.

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### **Publication**

In mainstream reports, incorporating the TCFD recommendations

### **Status**

Complete

### **Attach the document**

 Annual-Report-2019.pdf

### **Page/Section reference**

Company's Mission: pag. 2  
Business Model: pag. 4  
Responsible and sustainable approach: pag. 5  
Letter to Shareholders: pag. 6-11  
Strategy: pag. 16-19  
Risk Management: pag. 20-23  
Governance: pag. 24-28  
Consolidated disclosure of non-financial information: Section on Carbon Neutrality in the Long Term, pag. 106-115  
Climate Governance: pag. 112  
Climate Strategy: pag. 113  
Climate-related Risk & opportunities: 112  
Emission reduction targets: pag. 114  
Emission reduction figures: pag. 115

### **Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets

### **Comment**

Eni's 2019 Consolidated Disclosure of Non-Financial Information include a specific section dedicated to Decarbonization, that is structured around the four topic areas covered by TCFD recommendations: governance, risk management, strategy and metrics and targets. For a complete analysis please refer to Eni for 2019 Report - Carbon neutrality in the long term.



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**Publication**

In voluntary sustainability report

**Status**

Complete

**Attach the document**

 Eni-for-2019-A just transition.pdf

**Page/Section reference**

Pag. 22-23

Governance: pag. 10-11

Strategy: psg. 12

Emission targets: pag. 13

Risk & opportunities: pag. 16

**Content elements**

Governance

Strategy

Risks & opportunities

Emission targets

**Comment**

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**Publication**

In other regulatory filings

**Status**

Complete

**Attach the document**

 Annual-Report-On-Form-20-F-2019.pdf

**Page/Section reference**

Risk & opportunities: pag. 9-11

Strategy: pag. 26-30

Emission reduction targets: pag. 28

Governance: pag. 128 - 137

**Content elements**

Governance

Strategy

Risks & opportunities

**Comment**

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**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

 GHG-Emissions-along-the-value-chain-of-Eni-energy-product (4).pdf

**Page/Section reference**

Methodology for the assessment of GHG emissions along the value chains of Eni products: pag. 4-7  
GHG Emission figures: pag. 8

**Content elements**

Emissions figures

Other, please specify

Focus on the methodology for the assessment of lifecycle GHG emissions adopted by Eni

**Comment**

The report describes the fundamentals of the methodology for the all-inclusive evaluation of GHG emissions related to Eni's energy products, which has been adopted for the definition of Eni medium-long term decarbonization target.

This methodology accounts for the GHG emissions from all energy products and hydrocarbons managed and sold by Eni, namely total emissions (scope 1+2+3) including enduse.

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**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

 Assessment-of-industry-associations-climate-policy-positions.pdf

**Page/Section reference**

Eni's responsible engagement on climate change within business associations: pag. 4-7  
Result of review: pag. 8-9

**Content elements**

Other, please specify

Assessment of industry associations' climate policy positions

**Comment**

In order to define the clear company positioning on climate policy topics as well as robust internal guidelines

for a responsible engagement within business associations, Eni has decided to publish guidelines on Eni's responsible engagement on climate change within business associations. The document identifies the main topics Eni considers essential in the climate-related advocacy, in line with its strategy, and describes the result of the assessment carried out according to the guidelines, of the public positions of the business associations which Eni and its affiliates are a member of, to check the alignment of their positions with Eni's principles on climate-related topics.

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**Publication**

Other, please specify

Strategy presentation

**Status**

Complete

**Attach the document**

 2019-full-year-results-strategy 2020-2023.pdf

**Page/Section reference**

Strategy Pag. 4-5

Emission targets: 18-20

**Content elements**

Strategy

Emission targets

**Comment**

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**Publication**

In other regulatory filings

**Status**

Complete

**Attach the document**

 Corporate-Governance-Report-2019.pdf

**Page/Section reference**

Pag. 8-11, 64-65, 117-118

**Content elements**

Governance

**Comment**

## C15. Signoff

### C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

### C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Eni Chief Executive Officer	Chief Executive Officer (CEO)

## SC. Supply chain module

### SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

### SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	79,565,920,000

## SC0.2

**(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?**

Yes

## SC0.2a

**(SC0.2a) Please use the table below to share your ISIN.**

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	IT	0003132476

## SC1.1

**(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.**

## SC1.2

**(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).**

## SC1.3

**(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?**

Allocation challenges	Please explain what would help you overcome these challenges
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## SC1.4

**(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?**

Yes

## SC1.4a

**(SC1.4a) Describe how you plan to develop your capabilities.**

Eni pays particular attention to the impact of emissions from its activities along the entire supply chain, from the supply of goods and services for production processes, to the environmental impact linked to the use and disposal of finished products, as demonstrated by its commitments for 2050, communicated to the market at the presentation of its new strategy in February 2020.

Eni has developed a rigorous methodology for the comprehensive measurement of GHG emissions. This method considers scope 1, 2 and 3 emissions, both in absolute and relative terms, related to energy products sold, whether derived from our own or purchased production. This distinctive approach is more comprehensive than current emissions standards and provides an integrated view of emissions. The methodology was reviewed, independently, by experts from Imperial College London (via Imperial Consultants) whilst the results of its application were verified by the independent certification company RINA. **The methodology will be continuously updated in order to be as accurate as possible and also assessing new items, including allocation to customers.**

## SC2.1

**(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.**

## SC2.2

**(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?**

## SC3.1

**(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?**

## SC3.2

**(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?**

## SC4.1

**(SC4.1) Are you providing product level data for your organization's goods or services?**

## Submit your response

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	<b>I am submitting to</b>	<b>Public or Non-Public Submission</b>	<b>Are you ready to submit the additional Supply Chain Questions?</b>
I am submitting my response	Investors Customers	Public	

**Please confirm below**

I have read and accept the applicable Terms