

# Welcome to your CDP Climate Change Questionnaire 2020

### C0. Introduction

#### C<sub>0.1</sub>

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

Equinor is an international energy company with operations in over 30 countries and approximately 21,400 employees worldwide. The company's headquarter is in Stavanger, Norway. Equinor was founded as The Norwegian State Oil company (Statoil) in 1972, and it became listed on the Oslo Børs (Norway) and New York Stock Exchange (US) in June 2001.

On 15 May 2018 the Annual General Meeting decided to change the name of the company from Statoil to Equinor. The new name supports the company's strategy and development to a broad energy company.

Equinor is among the world's largest net sellers of crude oil and condensate, and the second largest supplier of natural gas to the European market. Equinor has substantial processing and refining operations. Equinor's New Energy Solutions was set up in 2015 as a separate business area to develop renewables, primarily within offshore wind, and low-carbon solutions across Equinor.

Equinor aims to maximise and develop the value of our unique position on the Norwegian Continental Shelf and our international oil and gas business, focusing on our strategic pillars: Always safety; High value and Low carbon.

Equinor has eight business areas: Development and Production Norway (DPN), Development and Production International (DPI), Development and Production Brazil (DPB), Marketing, Midstream and Processing (MMP), Technology, Projects and Drilling (TPD), Exploration (EXP), New Energy Solutions (NES) and Global Strategy and Business Development (GSB). In addition, the support functions consist of Corporate people and leadership, Chief Operating Officer, Chief Financial Officer, Legal, Corporate communication and Audit.

#### C<sub>0.2</sub>

#### (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



#### C<sub>0.3</sub>

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

Argentina

Bahamas

Brazil

Canada

Denmark

Germany

Norway

United Kingdom of Great Britain and Northern Ireland

United Republic of Tanzania

United States of America

#### C<sub>0.4</sub>

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

USD

#### C<sub>0.5</sub>

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

Operational control

#### 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

#### Oil and gas value chain

Upstream

Midstream

Downstream

Chemicals

#### Other divisions

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
Board Chair	Equinor ASA's board of directors (BoD) reviews and monitors sustainability issues, including climate-related business risks and opportunities.
	The BoD safety, sustainability and ethics committee (BoD SSEC) consists of selected members of the board. The committee assists the BoD in its supervision of the company's sustainability policies, systems and principles. This includes oversight of climate-related strategy, risk and performance.
	In 2019, the BoD approved the decision to review Equinor's climate ambitions and to develop a new Climate Roadmap to ensure a competitive and resilient business model in the energy transition. As a result, on 6 Jan 2020, Equinor announced aims to cut emissions in Norway towards near zero in 2050. The complete climate roadmap was launched February 6 2020. A key feature was the ambition of net zero operations globally by 2030 (scope 1 and 2).

### 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	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies	Reviewing and guiding strategy The corporate executive committee and Equinor ASA board of directors (BoD) review and monitor sustainability issues, including climate-related business risks and opportunities and climate aspects related to investment decisions.



Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives

Overseeing major capital expenditures, acquisitions and divestitures

Monitoring and overseeing progress against goals and targets for addressing climate-related issues

Reviewing and guiding risk management policies Management of climate-related risks is embedded in our enterprise risk management process. All our activities carry risk, and risk management is therefore an integrated part of our performance framework. We identify, evaluate and manage risk to create sustainable value and avoid incidents. The risk process provides a standardised framework which allows for risk comparison and efficient decision making. Both upside and downside risks are assessed.

Our management system includes our policies, requirements and guidelines. Together with our corporate governance principles and performance framework, this forms the basis for how we are embedding climate and sustainability issues in our business activities.

Reviewing and guiding business plans. Executing the company's climate ambitions is a business line responsibility. Climate issues are regularly discussed by the corporate executive committee and board of directors.

Setting performance objectives.

In 2019, climate-related risk, performance and ambitions were extensively discussed in board meetings. The BoD safety, sustainability and ethics committee assists the BoD in its supervision of the company's climate and sustainability performance, including through quarterly updates on climate performance.

Monitoring and overseeing progress against goals and targets for addressing climate-related issues. The heads of the group level sustainability function is responsible for setting strategic direction and reporting on risk and performance at group level related to climate to the corporate executive committee and board of directors, including relevant committees. Relevant climate risk and performance issues are also integrated into the quarterly risk and performance updates by the CFO to the CEC and BoD.



#### C<sub>1.2</sub>

## (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	More frequently than quarterly

#### 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).

Executing the company's climate ambition is a line responsibility. This means that all Business areas are responsible for translating strategy into actions. This is monitored through KPIs, monitoring indicators and targets.

Twice a year, the corporate executive committee and board of directors review and monitor corporate-wide climate change-related business risks and opportunities through group-wide risk and performance updates, conducted by the Chief Financial Officer.

Climate issues are monitored through regular risk and performance updates provided by the CFO area and through monitoring indicators and targets. The main sustainability KPI monitored on Board and CEC level is CO2 intensity for the upstream oil and gas portfolio (kg CO2 per boe). Serious Incident Frequency (SIF) and CO2 intensity impact the remuneration for the CEO and other members of the executive committee. Other climate-related indicators monitored at the business area level include CO2 emission reductions (tonnes), the share of R&D expenses to energy efficiency, and low carbon projects.

The Corporate Sustainability Unit (CSU) is responsible for monitoring group-level climate performance, and for providing specific updates on sustainability and climate performance to the corporate executive committee and the board of directors' safety, security and ethics committee, on a quarterly basis. CSU is headed by SVP Sustainability, and this position reports to the Corporate Executive Committee (CEC) member, Executive Vice President for Global Strategy and Business Development (GSB).

The CEO is responsible for day-to-day operations and presents proposals to the BOD for strategy, goals, actions and financial statements, as well as important investments to the BoD.



### 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	Yes	Climate and sustainability is embedded in our
1		performance and reward framework.

### 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 inventivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Efficiency target Company performance against a climate- related sustainability index	In 2019, the assessment of the reward for the CEO's delivery, within the HSE perspective, was based on the company performance versus the targets set for two of the corporate level key performance indicators (KPIs): total serious incident frequency (SIF) and CO2 intensity for the upstream oil and gas portfolio. The 2019 CO2 intensity target was 9.3kg CO2/boe.
Other C-Suite Officer	Monetary reward	Emissions reduction target Company performance against a climate- related sustainability index	Target for Development and production Norway (DPN): Achieve 40% reduction in GHG emissions in Norway by 2030, compared to 2005 levels.  Similarly, the other members of the Corporate Executive Committe have targets linked to their respective Business area targets. Individual performance goals are established to define the individual's role in contributing to Equinor's ambitions and strategies. As a part of the annual performance appraisal, the leader concludes his/her performance assessment based on "what and how" the individual has performed throughout the year. The conclusion is manifested with an adjustment upwards/downwards of the individual's annual variable pay within the financial framework given by corporate People and Leadership.
All employees	Monetary reward	Emissions reduction target Company performance	The general bonus for all employees is based on a holistic assessment of company performance which includes, among other areas, CO2 intensity for the upstream oil and gas portfolio and



		against a climate- related sustainability index	execution of climate strategies.
All employees	Non- monetary reward	Emissions reduction project Energy reduction project Efficiency project	The CEO's sustainability award is awarded annually, with the purpose of driving and rewarding significant efforts within the environment, climate, and social responsibility.
Environmental, health, and safety manager	Monetary reward	Emissions reduction project Energy reduction project Efficiency project Company performance against a climate- related sustainability index	Energy efficiency targets/KPIs related to operational efficiency are commonly used for sustainability managers throughout the company. In our process for managing people development, deployment, performance and reward (People@Equinor), we set goals for what and how we want to deliver as teams and individuals, and to drive our personal development. Employees' performance is assessed in a holistic way, equally assessed of "what we deliver" and "how we deliver".

### 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	1	In the context of climate change the risk horizons tend to be longer than for other business risks. However, Equinor's enterprise risk management process consists of a more thorough assessment of potential impacts, probabilities and uncertainties on a running 12 months horizon. Hence the short-term horizon is set to 1 year.
Medium- term	1	3	Risk issues further out in time are assessed qualitatively and illustrated on a risk issues radar on a 1-3 years horizon or a beyond 3



			years horizon. Additionally, a quantitative stress test is conducted against IEA scenarios, with a long-term horizon (2040 and beyond).
Long- term	3	20	Risk issues further out in time than 12 months are assessed qualitatively and illustrated on a risk issues radar with a 1-3 years horizon or a beyond 3 years horizon.  Equinor annually presents its energy scenarios, including energy market outlook towards 2050, in its "Energy Perspectives" report.  Additionally, a quantitative stress test is conducted against IEA scenarios, with a long-term horizon (2040 and beyond).

#### C2.1b

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

A specific risk or opportunity is considered as having a substantive financial impact, if it has a probability-weighted impact on net present value after tax for Equinor of around USD 100 million or more. This is not an absolute definition, but a rule of thumb. Risks and opportunities are considered to have substantive strategic impact, if there is high probability that they could significantly influence continued value creation from existing assets, project portfolio, progress on major development projects or achievement of the company's key ambitions and objectives.

#### C2.2

#### (C2.2) Describe your process(es) for identifying, assessing and responding to climaterelated 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**



All our activities carry risk, and risk management is therefore an integrated part of our performance framework ("Ambition to Action"). We translate our purpose, vision and strategy into strategic objectives, risks, KPIs and actions describing what we want to deliver. Equinor's risk management process is based on ISO31000 Risk management – principles and guidelines. The process provides a standardised framework and methodology for assessing and managing risk. A standardisation of the process across Equinor ASA and its subsidiaries allows for comparable risk levels and efficiency in decisions and it enables the organisation to create sustainable value while seeking to avoid incidents. The process seeks to ensure that risks are identified, analysed, evaluated and managed. Risk adjusting actions are subject to a cost-benefit evaluation (except certain safety or integrity related risks and any other in which decisions for actions are regulated by other principles).

Risk management in Equinor follows a common, corporate-wide documented process valid for all parts of our business. It includes company-wide requirements, a specific work process and good practice guidance. These governing documents have a prominent place in our management system which is available to all employees and relevant for all entities.

Equinor regularly assesses climate-related business risk, whether political, legal, regulatory, market, technology, physical or related to reputation impact, as part of the enterprise risk management process. This includes monitoring of external developments, and upsides (opportunities) and downsides are assessed. Equinor uses tools such as internal carbon pricing, scenario analysis and sensitivity analysis of the project portfolio against various oil and gas price assumptions. We monitor technology developments and changes in regulation and assess how these might impact the oil and gas price, the cost of developing new assets and the demand for oil and gas and opportunities in renewable energy and low carbon solutions.

This risk management process is based on a bottom-up risk identification, assessment, action-setting and reporting process combined with a top-down assessment. Climate-related risks are included in those processes, and their types will depend on the nature of the business (e.g. physical impacts for operations entities, market related risks/transition risks for units making investment decisions and/or marketing oil and gas, market risks (including upside risk) for our renewables activities and general risks such as reputation, litigation, market, regulation and technology development at company level).

We use both quantitative and qualitative assessment methods. Pre-defined risk factor checklists are available in support of these assessments, including for climate. The bottom-up process is complemented with a top-down risk identification and assessment carried out by corporate functions and through leadership teams' risk review meetings.

Since 2015 we have been performing an annual sensitivity test of our portfolio against IEA's energy scenarios described in their World Energy Outlook (WEO) reports. The WEO 2019 describes three scenarios: Current Policies, Stated Policies and Sustainable Development (SDS). These scenarios have different oil, gas and CO2 price



assumptions, which are applied in the sensitivity testing to our portfolio. The results are compared to the results generated based on our own economic planning assumptions. The SDS is a "well below 2°C" scenario (1.7-1.8 °C). However, according to the report of the International Panel on Climate Change on impacts of a 1.5°C scenario, the oil and gas demand needs to be significantly lower than in a "well below 2°C" scenario and thus represents a larger downside for Equinor than estimated in the SDS scenario. To cater for this uncertainty, we have added a sensitivity to the IEA price, where we apply a gradual reduction in the oil price from 2020, reaching a long-term oil price assumption of USD 50 per barrel in 2040, which is USD 9 per barrel lower than the long-term oil price of USD 59 per barrel in the SDS. Under the Current Policies and the Stated Policies scenarios we would expect to see an increase in portfolio value, but under the Sustainable Development scenario (using both the IEA price assumptions and our USD 50 per barrel assumption), there would be a significant value reduction. (Ref. page 17-19 in Equinor's 2019 Sustainability Report;

https://www.equinor.com/en/investors.html#annual-reports).

Risks that are identified at a medium or lower level in the organization, are discussed in management teams' risk review meetings and are either managed at that level or lifted to the next level, and might be reported to and reviewed by the Corporate Executive Committee and the Board, or the relevant Board's committee. This reporting to the CEC and the Board or Board's committee takes place every six months.

Furthermore, Equinor is making its own scenario analyses which informs identification and assessment of long-term risk issues, and the alternative price scenarios mentioned above. (Ref. Equinor's Energy Perspectives).

Once upside and downside risks have been identified and assessed, mitigating or value-enhancing actions are proposed and agreed upon. Action setting is an integral part of our risk management process. Actions are reported and followed up in the Risk Management tool in our Management Information System (MIS), which is the main tool in our performance framework. The proposed actions are reviewed and possibly modified by management at a higher level. If an action requires significant investments, a project will be initiated and the case matured through feasibility, concept select and concept definition phases before a final investment decision is taken.

Example of mitigation of transition risk: To mitigate potential effects of future cost on carbon, we require all producing assets and non-sanctioned projects in all countries to include a carbon price in their investment case. In countries where there is currently no carbon price in place, we apply USD 55/tonne CO<sub>2</sub>. This is done to ensure that the asset will be resilient if a carbon price should be introduced. In countries where the current or predicted CO<sub>2</sub> price is higher than USD 55/tonne, such as in Norway, where both a CO<sub>2</sub> tax and the EU ETS apply, we use the expected CO<sub>2</sub> price. We also test the sensitivity of a carbon price of USD 100/tonne to test the robustness of our assets. Additionally, individual investment projects are tested against hurdle rates which are significantly lower than in IEA's SDS price paths.

Example of mitigation of physical climate risk: Metocean data are included in our design-



s and risk-analyses for new facilities. An example has been that the air-gap between sea level and deck levels on the Johan Sverdrup installations was adjusted to allow for sea level rise in the future.

### 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	The political debate on and processes for reviewing current regulation potentially resulting in regulatory changes, are followed closely by relevant offices and sustainability staff on corporate and business area level. Examples of relevant regulations are:  - the Norwegian Climate Change Act and the UK Climate Change Act - costs of GHG emissions (e.g. Norwegian CO2 taxes and EU emission allowances), - requirements on GHG emission monitoring and reporting in Norway, EU and the US, - low-emission solutions in field developments particularly in Norway where all new field developments are required to assess opportunities for power from shore - requirements on share of biofuels in fuels for transport in Norway and EU  As the oil and gas sector is typically using large quantities of energy in production and processing of oil and gas, and as this energy is mainly provided by gas-fuelled power generators creating considerable CO2 emissions, developments in current regulation is important for our climate-related risk assessments as it may impact costs on our GHG emissions, i.e. operations cost, investment needs and market conditions. Information about climate-related regulation is used to inform Equinor's internal carbon price assumptions used in investment analysis.  Risk example: Currently Equinor is bearing costs on our Equinor- and partner-operated CO2 emissions in Norway, EU, UK and Nigeria (emission trading schemes and/or CO2 tax). The largest part of CO2 emissions on which there is a CO2 price, is on our emissions in Norway. 10.1 million tonnes out of Equinor's global scope 1 CO2 emissions of 14.2 million tonnes are from our facilities in Norway. Therefore, changes in EU ETS prices and policies to influence CO2 emission taxation levels are important to Equinor. We make assumptions on future CO2 prices and include such costs in business



Emerging regulation	Relevant, always included	Emerging policies and regulations are followed closely by relevant offices, for example in our offices in Oslo, Brussels, London, Berlin and Washington, and sustainability staff at corporate level and in our business areas. Examples are:  - Klimakur 2030 (Climate cure 2030) for Norway which addresses emissions outside the EU ETS sector. Relevance for Equinor is related to reduced emission in transport, emissions of methane and nmVOC and carbon capture and storage.  - The European Green Deal which is EU's long-term strategy to reach climate neutrality by 2050. A European Climate Law will be proposed. Reaching the 2050 target will require action by all sectors.  - Potential deregulation in the US as a consequence of the notice of withdrawal from the Paris Agreement.  Another example is monitoring of potential introduction of GHG emission taxes or trading systems in other countries where we operate.  Emerging regulation is important for our climate-related risk assessments as it may impact costs on our GHG emissions, operations cost, investment needs and market conditions. Information about emerging climate-related regulation is used to inform Equinor's internal carbon price assumptions used in investment analysis. Emerging regulation may also lead to direct support mechanisms (e.g. for carbon capture and storage).  Risk example: The Norwegian regulator has an ongoing process as part of the work on "Klimakur 2030" for considering taxation on methane emissions. As most of Equinor's oil and gas producing and processing facilities are in Norway, potential changes in regulations of such emissions are important to us.
Technology	Relevant, sometimes included	Because of Equinor's strategic direction towards a low carbon future, many teams address technology related risks (upside/downside), for example related to CCUS, hydrogen, battery technology, renewable energy, low CO2 intensity solutions, improvements in methane emissions and application of renewables in oil and gas production.  Example: Equinor is working with technology partners to develop more radical CO2 reduction solutions from our own future operations. One option that may become promising, is using compact offshore CO2



		capture & storage (CCS). CO2 emissions can be reduced with 60-80% with this technology. CO2 capture units that are modularized and compact may be the solution for remote installations and floating production facilities, especially if the CO2 can be injected locally. The economics improve if the CO2 is dissolved in injection water. Equinor has called this concept 3CWITM, or Compact CO2 Capture and Carbonated Water Injection and is working with engineering partners such as Aker Solutions to develop offshore modules. Further process intensification holds the promise of reducing the size and weight significantly but is less mature. For example, 3C AS is developing and commercializing rotating absorption and desorption.  This is an example of an opportunity offered through development of new technologies, but it also represents a risk if not successfully developed and implemented as lack of such solutions could potentially put future field developments at risk.
Legal	Relevant, always included	Ongoing and emerging climate-related litigation is monitored, and potential effects on policy-making assessed. Whilst the majority of cases are still US-focused, a significant number of claims are now being brought in other jurisdictions, and 2020 is likely to see a continuation in this trend. Our main focus is on climate litigation against oil and gas companies and climate litigation against governments that may affect energy companies in jurisdictions where we operate.  Examples include the California case against fossil fuel companies in the US, the Urgenda case in the Netherlands and the climate case in Norway (the latter is accepted to be brought up to the Supreme Court in plenum due to the principal importance of the case).  Risk example: Outcomes of lawsuits may impact future climate-related legislation in countries where we operate and/or lead to continued
		expansion of climate change litigation worldwide. As an example, the climate case in Norway is about whether the Norwegian government violated the Norwegian constitution by issuing a block of oil and gas licenses for deep-sea extraction from locations in the Barents Sea (in 23rd concession round). This case could influence future concession activities and access opportunities for the oil and gas industry to prospective oil and gas resources in the Barents Sea.
Market	Relevant, always included	Potential future changes in demand for our products (oil, gas and renewable energy in key markets) are analysed in our "Energy Perspectives" which is published annually. This publication for 2019 contains market-related analyses and discussions of global energy, oil and gas demand, and renewable energy generation.



		Risk example: A transition to a low carbon economy contributes to uncertainty over future demand and prices for oil and gas as described in the section "Oil and natural gas price risks". Such price sensitivities of the project portfolio are illustrated in the "portfolio stress test" as described in pages 17-19 in the Equinor's Sustainability Report 2019. Increased demand for and improved cost-competitiveness of renewable energy, and innovation and technology changes supporting the further development and use of renewable energy and low-carbon technologies, represent both threats and opportunities for Equinor.  The competitiveness of the choices Equinor makes regarding what renewable business opportunities are pursued and invested in is subject to risk and uncertainty.
Reputation	Relevant, always included	Climate-related issues are always part of our assessments of reputational risks. Over the last couple of years there have been many examples where stakeholders express negative climate-change based views on the oil and gas industry, e.g. demonstrations against our activities in Australia and in the Barents Sea.  Risk example: Strongly communicated opposition against the oil and gas sector may lead to difficulties in retaining and attracting employees, changes in finance institutions views on our company, consumer preferences and future policy development.
Acute physical	Relevant, sometimes included	Changes in physical climate parameters could impact Equinor's operations, for example through restrained water availability, rising sea level, changes in sea currents and increasing frequency of extreme weather events. Although Equinor's facilities are designed to withstand extreme weather events, there is significant uncertainty regarding the magnitude of impact and time horizon for the occurrence of physical impacts of climate change, which leads to considerable uncertainty regarding the potential impact on Equinor. As most of Equinor's physical assets are located offshore, the most relevant potential physical climate impact is expected to be rising sea level. Although it can't be stated that the incident was caused by climate change, the damages to our oil terminal at Bahamas caused by the hurricane Dorian in September 2019, is an example of what could be caused by extreme weather events.  Example: Acute physical risks are assessed by inclusion of metocean data in our design-analyses and risk-analyses.
Chronic physical	Relevant, always included	Changes in physical climate parameters could impact Equinor's operations, for example through restrained water availability, rising sea level, changes in sea currents and increasing frequency of extreme weather events. As most of Equinor's physical assets are located



offshore, the most relevant potential physical climate impact is
expected to be rising sea level.
Example, the air-gap between sea level and deck levels on the Johan
Sverdrup installations was adjusted to allow for sea level rise in the
future.

#### 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
Carbon pricing mechanisms

#### Primary potential financial impact

Increased direct costs

#### Company-specific description

Risk of increasing cost on carbon emissions

Our Equinor- and partner-operated production in Norway (constituting around 2/3 of Equinor's total entitlement production) is already subject to Norwegian CO2 taxation and is part of the EU ETS. Furthermore, Equinor is also bearing costs on CO2 emissions from our Equinor- and partner-operated activities in Denmark, the UK, Germany and Nigeria (emission trading schemes or CO2 tax).

There is a possibility that CO2 pricing will be implemented in more countries where we have or plan to have oil and gas production. The IEA has in their Sustainable Development Scenario assumed implementation of CO2 pricing following two selected price paths dependent on a country categorisation (advanced economies, selected developing economies). The relevant assets for Equinor that not yet have a carbon pricing system in place in the "advanced economies" category are in the US and Canada, while our relevant assets in the "selected developing economies" category are in Brazil and Russia. Although likelihood, timing and price level of a possible CO2 pricing in these countries are uncertain, we have used the assumptions in the IEA SDS



scenario for illustrating this risk.

CO2 pricing in more countries than today would imply higher production costs and reduced cash flow and profitability of our assets in such countries.

#### Time horizon

Long-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)

600,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

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

If we assume that our activities in the US, Canada, Brazil and Russia become subject to carbon costs from 2030 as described in the IEAs Sustainable Development Scenario\*, this would represent a reduced cash flow after tax of approximately 600 million USD (net present value).

\*IEA uses different carbon prices depending on country, starting from 2030.

This forward-looking statement reflects current views about future events and are, by their nature, subject to significant risks and uncertainties because they relate to events and depend on circumstances that will occur in the future and are beyond Equinor's control and are difficult to predict, including societal shifts in consumer demand and technological advancements. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we cannot assure you that future results will meet these expectations. You should therefore not place undue reliance on these forward-looking statements. Actual results could differ materially from those anticipated in these forward-looking statements for many reasons. Equinor does not assume any responsibility for the accuracy and completeness of any forward-looking statements.

Furthermore, our sensitivity analysis does not consider how the portfolio and performance would change in a scenario with increased CO2 costs. In such a situation, adaptations to tax regimes could be anticipated.



#### Cost of response to risk

25,000

#### Description of response and explanation of cost calculation

Our management method includes the use of an internal carbon price and evaluation of carbon intensity on both a project and portfolio level in our investment and divestment decisions, the use of energy scenarios to inform our strategy and planning, stress testing and monitoring of climate policy and regulatory outlook in relevant countries. For all projects outside of Norway, we apply a minimum carbon price of USD 55 per tonne CO2 in all investment analysis, to ensure that the effect of a potential higher future carbon cost is taken into account in our investment decisions, and to make our project portfolio robust toward such potential increases. The cost of the internal carbon price is higher than in IEAs Sustainable Development Scenario, as it applies earlier and to all countries. We increased the internal carbon price from 50 to USD 55 per tonne CO2 in 2018.

For projects in Norway, we apply the actual carbon cost (around USD 80 per tonne CO2 in 2019). As an example of opportunities related to avoidance of CO2 costs is the further utilization of power from shore to Utsira High by partial electrification of the Sleipner Field Centre, with an estimated reduction of CO2 emissions by 150,000 tonnes of CO2 per year. A final investment decision is expected later in 2020. Other potential electrification opportunities being assessed are for the Oseberg Field, Troll B and C and Hammerfest LNG.

Additionally, Equinor performs an annual sensitivity analysis ("stress test") of its portfolio against the price assumptions in the International Energy Agency's (IEA) energy scenarios. The cost of management is here illustrated by the cost of performing such analyses in investment decisions. (Assuming 30 projects, 3 hours analysis work each).

#### 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



Increased capital expenditures

#### Company-specific description

Risk of increasing capital expenditures due to emission reduction measures. The Norwegian government has recently established a goal to reduce greenhouse gas emissions in Norway with 50% to 55% in 2030 compared to 1990 levels. In alignment with the national goal for Norway, Equinor has launched new climate ambitions to reduce the absolute greenhouse gas emissions from its operated offshore fields and onshore plants in Norway by 40% by 2030, 70% by 2040 and to near zero by 2050. By 2030 this implies annual cuts of more than 5 million tonnes, corresponding to around 10% of Norway's total CO2 emissions. (As for the EU ETS targets, 2005 is used as a baseline for emissions reductions). The 2030 ambition will require investments of around NOK 50 billion for Equinor and its partners.

A 40% reduction by 2030 is planned to be realised through large scale industrial measures, including energy efficiency, digitalisation and the launch of several electrification projects at key fields and plants. An important case being matured is the further utilization of power from shore to Utsira High by partial electrification of the Sleipner Field Centre, with an estimated reduction of CO2 emissions by 150,000 tonnes of  $CO_2$  per year. A final investment decision is expected later in 2020. Other potential electrification opportunities being assessed are for the Oseberg Field, Troll B and C and Hammerfest LNG.

#### Time horizon

Medium-term

#### Likelihood

Very likely

#### Magnitude of impact

Medium-high

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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

2,300,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

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

The financial impact figure shown is an estimated Equinor share of the CAPEX estimate of NOK 50 billion (using currency exchange rate of 8.8 NOK/USD) for the period 2020 - 2030 related to measures to fulfil our ambitions to reduce GHG emissions by 40% in 2030. Equinor's share will depend on the ownership share in the relevant joint ventures,



but is on an average close to 40%, which is applied here.

#### Cost of response to risk

2,300,000,000

#### Description of response and explanation of cost calculation

A 40% reduction by 2030 will be realised through large scale industrial measures, including energy efficiency, digitalisation and the launch of several electrification projects at key fields and plants, including the Troll and Oseberg offshore fields and the Hammerfest LNG plant.

The 2030 ambition will require investments of around NOK 50 billion for Equinor and its partners. Subject to positive investment decisions in the licences, these investments will have neutral to positive net present value, in addition to strengthening future competitiveness.

Further reduction ambitions towards 70% in 2040 and close to zero in 2050 will entail additional measures, further electrification projects, consolidation of infrastructure as well as opportunities to develop new technologies and value chains.

Projects for electrification of fields and plants follow a phased approach consisting of feasibility, concept select, definition and execution phases with decision gates at the end of each phase. By carrying out these early phase assessments, we aim to identify the best business cases for such emission reduction initiatives and pro-actively choose measures rather than e.g. being instructed.

An investment decision was made in 2019 regarding Hywind Tampen (partial electrification of assets through use of floating offshore wind). An important case being matured in 2020 is the further utilization of power from shore to Utsira High by partial electrification of the Sleipner Field Centre, with an estimated reduction of CO2 emissions by 150,000 tonnes of  $CO_2$  per year. A final investment decision is expected later in 2020. Other potential electrification opportunities being assessed are for the Oseberg Field, Troll B and C and Hammerfest LNG.

The reported cost of management is the same as Equinor's share of estimated CAPEX reported above.

#### Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Downstream



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

Market

Changing customer behavior

#### **Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

#### Company-specific description

Risk related to reducing demand for oil and gas

There is continuing uncertainty over demand for oil and gas after 2030, due to factors such as technology development, climate policies, changing consumer behaviour and demographic changes. Equinor uses scenario analysis to outline different possible energy futures. As such, technology development and increased cost-competitiveness of renewable energy and low-carbon technologies represent an upside for Equinor. As an example, the development of battery technologies could allow more intermittent renewables to be used in the power sector. This could impact Equinor's gas sales, particularly if subsidies of renewable energy in Europe were to increase and/or costs of renewable energy were to significantly decrease. On the other hand, Equinor's renewable energy business could be impacted if such subsidies were reduced or withdrawn. As such, there is significant uncertainty regarding the long-term implications to costs and opportunities for Equinor in the transition to a lower-carbon economy.

#### Time horizon

Long-term

#### Likelihood

More likely than not

#### 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)

8,500,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

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

Equinor has analysed the sensitivity with changing the oil and gas prices and keeping other parameters constant, of its project portfolio (equity production of producing assets and development projects, exploration excluded) against the assumptions regarding commodity and carbon prices in the energy scenarios in IEA's "World Economic Outlook 2019". The analysis demonstrated a positive impact of around 18% on Equinor's net present value (NPV) when replacing Equinor's price assumptions as of 1 December



2019 with the price assumptions in the IEA's Stated Policies Scenario, a positive impact of 36% related to the Current Policies Scenario, and a negative NPV impact of approximately 14% related to the Sustainable Development Scenario.

If we assume that the financial impact can be illustrated by the result of 14% from the IEAs Sustainable Development Scenario, the impact for Equinor would be USD 8.5 billion (14% of Equinor's market cap of approximately USD 68 bn as of May 13 2020).

This forward-looking statement reflects current views about future events and are, by their nature, subject to significant risks and uncertainties because they relate to events and depend on circumstances that will occur in the future and are beyond Equinor's control and are difficult to predict, including societal shifts in consumer demand and technological advancements. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we cannot assure you that future results will meet these expectations. You should therefore not place undue reliance on these forward-looking statements. Actual results could differ materially from those anticipated in these forward-looking statements for many reasons. Equinor does not assume any responsibility for the accuracy and completeness of any forward-looking statements.

#### Cost of response to risk

750,000,000

#### Description of response and explanation of cost calculation

The risk is managed through

- integrating climate considerations in our strategy, performance management and decision making
- applying break-even hurdle rates to ensure that our projects are robust towards lower oil and gas prices.
- maintaining a strong cost discipline
- diversifying our portfolio to be less vulnerable towards oil and gas price fluctuations, by growing in renewables and low carbon solutions such as CCS and hydrogen.
- annual scenario analyses and stress-testing as published in "Equinor's Energy Perspectives"
- significant growth in renewable energy
- R&D efforts. Equinor's ambition is to reach a 25% share of R&D expenditure committed to energy efficiency and low carbon projects by 2020.

Cost of response to risk: The number provided (USD 750 million) represents the average annual gross CAPEX expected for investments in the renewables area in 2020 and 2021. As presented at our Capital Markets Update in February 2020, the annual CAPEX for renewables is expected to be USD 0.5-1 billion in 2020-2021 and USD 2-3 billion in 2022-2023.

Case example: In 2019, Equinor's renewable energy production (equity basis) increased from 1.3 to 1.8 TWh. The increase is due to a growing portfolio and the first full year of



production at Arkona. Capital expenditure on new energy solutions in 2019 was around USD 0.3 billion. The increase is in line with the strategic direction of growing in renewables.

#### 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 production capacity

#### Company-specific description

Opportunities related to further development of our renewables business Equinor's ambition is to become a global offshore wind major, drawing on our extensive offshore experience to drive the industry forward. Wind power is a key enabler in the world's energy transition. In 2026, Equinor expects a production capacity from renewable projects of 4 to 6 GW, Equinor share, mainly based on the current project portfolio. This is around 10 times higher than today's capacity, implying an annual average growth rate of more than 30%. Towards 2035, Equinor expects to increase



installed renewables capacity further to 12 to 16 GW, dependent on availability of attractive project opportunities.

#### Time horizon

Medium-term

#### Likelihood

Very likely

#### Magnitude of impact

Medium-high

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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

2,500,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

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

The financial impact figure provided (USD 2.5 billion) represents the average annual gross CAPEX expected for investments in the renewables area in 2022 and 2023. As presented at our Capital Markets Update in February 2020, the annual CAPEX for renewables is expected to be USD 0.5-1 billion in 2020-2021 and USD 2-3 billion in 2022-2023. The expected returns are 6-10% (real), with equity returns being higher.

#### Cost to realize opportunity

2,500,000,000

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

Equinor is building material offshore wind clusters in the UK, the US North East and in the Baltics. Offshore wind is an important enabler in the world's energy transition, and we will use our offshore experience and capabilities to develop the industry further. The cost number provided (USD 2.5 billion represents the average annual gross CAPEX expected for investments in the renewables area in 2022 and 2023. As presented at our Capital Markets Update in February 2020, the annual CAPEX for renewables is expected to be USD 0.5-1 billion in 2020-2021 and USD 2-3 billion in 2022-2023.

#### Comment

#### Identifier

Opp2



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

Direct operations

#### Opportunity type

Resource efficiency

#### Primary climate-related opportunity driver

Use of more efficient production and distribution processes

#### Primary potential financial impact

Reduced direct costs

#### Company-specific description

Opportunity for reduced operating costs due to reduced emissions

Carbon efficient production of oil and gas can increasingly be a competitive advantage as carbon prices are expected to increase and be introduced in more countries. A lower carbon intensity would imply lower carbon costs per energy unit produced, and reduced GHG absolute emissions implies lower overall carbon costs. Equinor aims to maintain its position as an industry leading carbon efficient oil and gas producer, to reduce the CO2 intensity of the upstream operated oil and gas production to below 8 kg per barrel of oil equivalent by 2025; and to reach carbon neutral global operations by 2030. This can reduce existing levels of carbon costs and/or avoid potential higher costs in the future.

The main priority will be to reduce greenhouse gas emissions from own operations. Remaining emissions will be compensated either through quota trading systems, such as EU ETS, or high-quality offset mechanisms. By setting this ambition, Equinor demonstrates its long-standing support to carbon pricing and the establishment of global carbon market mechanisms as outlined in the Paris Agreement.

Ninety-one CO2 emission reduction initiatives were implemented in 2019, amounting to a total of around 303,000 tonnes of CO2. The most important types of measures were:

- energy efficiency measures such as installation of waste heat recovery units on drilling rigs, modification of turbines and heat systems, upgrade of isolation and utility system of boilers, modification of gas compressors and pumps, installation of LED lights and changes in operational procedures. These examples are relevant for our operations in Norway, Denmark, USA and Brazil

- flaring reduction measures offshore Norway and onshore USA

#### Time horizon

Medium-term

#### Likelihood

Likely

#### Magnitude of impact

Low



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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

16,000,000

Potential financial impact figure - minimum (currency)

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

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

A total of 91 emission reduction measures were implemented in 2019 resulting in a total reduction of annual emissions of slightly above 300.000 tonnes of CO2. The indicative number given above (USD 16 million) is the estimated annual financial impact of reduced CO2 taxes and EU ETS emission allowances resulting from our CO2 emissions reduction measures in 2019.

The figures are 100% estimates for the joint ventures, Equinor's share will depend on the ownership share for the joint venture in question.

#### Cost to realize opportunity

39,000,000

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

As part of our company-wide Climate Roadmap we have set specific goals and work systematically to achieve these. Key climate-related ambitions related to reduced emissions are:

Equinor aims to:

- reduce the net carbon intensity, from initial production to final consumption, of energy produced by at least 50% by 2050,
- strengthen its industry leading position on carbon efficient production, aiming for a CO2 intensity of less than 8.5 kg CO2/boe in 2025 and to reach carbon neutral global operations by 2030.
- to reduce the absolute greenhouse gas emissions from its operated offshore fields and onshore plants in Norway by 40% by 2030, 70% by 2040 and to near zero by 2050. By 2030 this implies annual cuts of more than 5 million tonnes, corresponding to around 10% of Norway's total CO2 emissions.

We believe these goals and the related actions will make us more resilient, and have a positive impact on reputation, talent attraction and social licence to operate.

Cost to realise opportunity: This cost estimate is based on an average, experienced abatement cost for similar measures. The figure is a 100% estimate for the joint ventures, Equinor's share will depend on the ownership share for the joint venture in question.



#### Comment

#### Identifier

Opp3

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

Downstream

#### 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

Opportunities related to hydrogen value chain

Reformation of natural gas into hydrogen, combined with permanent storage of released CO2, constitutes a new business opportunity. If successful, hydrogen could become a new decarbonised energy product (e.g. for heating and cooling of buildings, power generation and heavy transportation fuel) in Equinor's portfolio – basically delivering the same flexible energy product as natural gas does today, but with 95% or more reduced CO2 emissions. One of the projects that we're working together with Vattenfall and Gasunie on in the Netherlands is to convert a combined cycle gas turbine (CCGT), a gas fired power plant, and to run that on clean hydrogen. The use of hydrogen for this purpose would offer a flexible backup for intermittent renewable energy sources like power from wind-turbines. This is the project used as an example below. Equinor is also looking at using the gas distribution network in the North of England, convert that to carry hydrogen, and we do believe that liquid hydrogen would be and is a viable solution to decarbonize the heavier parts of the transportation segments, such as shipping. This would create a significant market for hydrogen as an energy product.

#### Time horizon

Long-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)



230,000,000

#### Potential financial impact figure - minimum (currency)

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

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

The financial impact is in this case shown as the approximate annual market value (USD 230 mill/year) of the natural gas consumed by a combined cycle gas turbine (CCGT) using 1 billion cubic meters of natural gas/year. A conversion of the CCGT to run on hydrogen (produced with very low CO2 emissions) will enable the current CCGT to operate as normal also in a carbon neutral future where strict CO2 emission targets would prevent CCGT to be run on natural gas.

#### Cost to realize opportunity

1,400,000,000

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

The main strategy to realise this opportunity is to continue progressing the joint project with Vattenfall and Gasunie in the Netherlands, aiming at converting a combined-cycle gas turbine, a gas fired power plant, and to run that on hydrogen. Additionally, R&D projects (e.g. on safety aspects and material technology) are initiated in support of developing this opportunity. In 2018 Equinor also contributed to the Northern Gas Networks' report H21 North of England, launched in 2018. The report sets out how 3.7 million homes and 40,000 businesses in the north of England, currently heated by natural gas, could be converted to hydrogen and made emission-free by 2034.

The cost to realise opportunity: This is an approximate, added cost which includes all elements for making the energy solution clean, such as reforming natural gas to hydrogen and CO2 management. There is potential to reduce the extra cost with targeted technology development, more projects and standardization (economy of scale)

#### Comment

#### Identifier

Opp4

#### 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

Opportunities related to CCS

Equinor is working to build a European value chain for carbon capture and storage (CCS). Through our activities within CCS, we are building capabilities and a competitive position for future business opportunities, also influencing positively Equinor's attractiveness as a business partner. This would imply a new revenue stream related to disposal of CO2 from customers (e.g. from waste incineration, cement production) and would also be basis for solutions for decarbonised hydrogen as an energy carrier which would also be a flexible solution to backup intermittent renewables in Europe.

A relevant example is the "Northern Lights" project (with Equinor as operator, and Shell and Total as partners) which includes transport and permanent storage of  $CO_2$  in a safe geological reservoir in the North Sea. Northern Lights is part of the Norwegian Government's "Full-scale value chain in Norway" demonstration project. The Northern Lights project is considered to be a necessary first step towards achieving relevant scale. In May 2020, the Northern Lights partners made their positive investment decisions, depending on positive investment decision by the Norwegian authorities and acceptance from the ESA.

#### Time horizon

Medium-term

#### Likelihood

Likely

#### Magnitude of impact

Medium-high

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

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

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

The Norwegian state's contribution, which constitutes an opportunity for the project, is currently not known.



#### Cost to realize opportunity

60,000,000

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

Our strategy to realize this opportunity includes R&D, pilot projects and concept studies. Equinor has long been a pioneer in CCS, and we are currently operating some of the largest carbon capture and storage projects worldwide (Sleipner and Snøhvit fields in Norway). This has demonstrated the technical viability of CCS. Additionally, Equinor is operating 'Technology Centre Mongstad' the world's largest facility for testing and improving CO2 capture. In 2016, Equinor participated in a Norwegian government-led study that confirmed the feasibility of offshore carbon storage on the Norwegian continental shelf. Equinor was assigned a contract with the governmental owned company Gassnova SF to carry out a concept and front-end engineering and design (FEED) study for CO2 transport and storage for this purpose in 2017, and shortly after Equinor entered into a partnership with Shell and Total to mature this opportunity jointly. The Northern Lights project has recently completed the FEED study for CO2 transport and storage. The partners made their conditional final investment decision in May 2020, the Norwegian authority approval and invest decision is expected in Q4 2020 and start of injection and storage of CO2 in Q1 2024 according to current plans. Equinor has a broad portfolio of R&D projects with the objective of reducing costs and risks for CCS.

The estimated costs related to project studies and staff for the Northern Lights project for the period up to project sanction, is approximately USD 60 million.

#### Comment

#### Identifier

Opp5

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

Direct operations

#### Opportunity type

**Energy source** 

#### Primary climate-related opportunity driver

Use of lower-emission sources of energy

#### Primary potential financial impact

Increased revenues through access to new and emerging markets

#### **Company-specific description**

Opportunities related to use of ammonia in maritime transport Equinor sees an opportunity for reducing CO2 emissions in its own maritime transport and to create a market for ammonia produced from hydrogen extracted from natural gas in a process where CO2 is captured and permanently stored in underground formations.



Ammonia produced from natural gas with CCS or by hydrolysis of water using renewable power will offer a CO2 emission free fuel for maritime transport. Use of such fuels is in support of the UN's International Maritime Organisation's strategy to halve emissions from international maritime operations by 2050.

For this purpose, Equinor has launched, in partnership with NCE Maritime Cleantech, Eidesvik Offshore, Wärtsilä and Prototech, a research project for testing use of carbon-free ammonia fuel cells on an offshore supply vessel.

#### Time horizon

Long-term

#### Likelihood

More likely than not

#### Magnitude of impact

Medium-low

#### 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)

130,000,000

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

11,000,000,000

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

The market potential for Equinor for production and sale of CO2 free ammonia is not yet known. However, a broad range estimate for potential financial impact can be made for illustrative purposes by applying estimates from a recent study by BloombergNEF ("Hydrogen: The Economics of Powering Ships", March 2020). In their "Oil endures" scenario an annual ammonia demand of 35 million tonnes/year is estimated for a case where 10% of all bunker fuels are green ammonia in 2050. In the same scenario 205 million tonnes/year of ammonia would be required in 2050 to reach net zero by 2070. The study also provides a range of ammonia prices of USD 381-558 per tonne ammonia. If an Equinor share of supply to such ammonia market for maritime fuel is assumed to be within a range from 1% to 10%, the following minimum and maximum figures for potential financial impact can be made:

- 1) a minimum case of 1% market share of a global market of 35 million tonnes per year at a price of USD 381 per tonne, i.e. USD 130 million per year
- 2) a maximum case of 10% share of global market of 205 million tonnes per year at a price of USD 558 per tonne, i.e. USD 11 billion per year

#### Cost to realize opportunity



26,000,000

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

To realize the opportunity, we have launched a project in partnership with several others. Eidesvik Offshore has been awarded a five-year contract for use of the supply vessel "Viking Energy" in a research project for developing, installing and testing long-distance sailing fuelled by carbon-free ammonia fuel cells. The technology will be tested on the vessel from 2024. The project will test whether the technology can deliver 100 percent carbon-free power over long distances. Other partners are NCE Maritime Cleantech, Wärtsilä and Prototech. Wärtsilä will deliver the power technology and ammonia storage and distribution systems. Prototech will deliver the fuel cell system. The project is part of the European innovation project ShipFC, a consortium of 14 European companies and institutions coordinated by NCE Maritime Cleantech.

The cost to realize the opportunity is based on the total budget of NOK 230 million for the ammonia research on Viking Energy. Parts of the budgeted costs are funded by the EU.

#### Comment

### 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, qualitative and 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	Equinor acknowledges that an energy transition is ongoing and want to be in the forefront of this change. "Low carbon" is one of the main strategic pillars on
scenario IEA NPS	which the governance of the company is based, and we embed climate considerations into decision making. Scenario analysis is one of the tools we



# IEA CPS Other, please specify

use to inform the decision makers of business objectives and strategy.

Equinor has annually performed a test of its portfolio against International Energy Agency's scenarios. This test is a result of a shareholder resolution in 2015, where it was requested to test the long-term robustness of our portfolio against the range of IEA scenarios. IEA's scenarios were selected because they are from an independent source and are widely accepted across the oil & gas industry, making it possible to compare results with other companies. Equinor's portfolio being tested consists of producing assets and non-sanctioned projects. Exploration activities are excluded from this test due to significant uncertainties around potential discoveries and development solutions.

In 2019, IEA describes three scenarios: "Current Policies," "Stated Policies" and "Sustainable Development" (SDS), which represent three different future pathways depending on varying climate policies. The scenarios and assumptions are presented in the World Energy Outlook (WEO) 2019. These scenarios have different short- medium- and long-term oil, gas and CO2 price assumptions, and these assumptions are applied to our portfolio to test its resilience.

The analysis performed in 2019 indicates that Equinor's portfolio is robust in all the IEA scenarios. When replacing Equinor's own assumptions regarding oil, gas and carbon prices with those of the IEA's "Current policies" and "Stated policies", the net present value (NPV) of Equinor's portfolio sees an increase of 36% and 18% respectively. When replaced with IEA's "Sustainable development" assumptions, Equinor's NPV will decrease by 14%.

We also performed a sensitivity analysis to IEA's oil price, where we apply a gradual reduction in the oil price to a long-term price of 50 USD/bbl in 2040 (all other price assumptions are kept unchanged), which is 9 USD/bbl lower than the long-term oil price of 59 USD/bbl in the SDS scenario. As a result, Equinor's net present value decreased by 17%. In this low-price scenario, our producing assets continue to generate a positive cashflow. However, a few assets will have an earlier economic cut-off and a few non-sanctioned projects after 2025 could be challenging.

The scenario analysis confirms that we should expect a lower value generation in a low-price environment. It guides us to follow a set of financial principles in our business planning and investment decisions that enables us to stay resilient in the long run:

- cash generation at all times
- · capture value from cycles
- · maintain cost competitiveness and capex flexibility

Examples for following these principles include exiting oil sands project in



Canada and stopping actively exploring for heavy oil. Furthermore, we maintain a contingency plan in the event of a sudden price drop like we experienced in 2014. This plan contains measures to reduce cost and investments in the short run in order to stay cash flow positive despite low prices.

### 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	Climate change and the global energy transition creates new business opportunities. To thrive in the energy transition, Equinor aims to maintain our position as one of the industry leaders in carbon efficient oil and gas production, grow in new energy solutions and help accelerating decarbonisation of society. Our name change from Statoil to Equinor in 2018 reflected the global energy transition and our development as a broad energy company.  The transformational changes of Equinor's offshore wind portfolio in the past few years demonstrate how our strategy enables us to respond to climate-related risks and opportunities.  The renewable market has been changing and growing at an unprecedented pace, presenting opportunities for decades of growth. We leverage our core competencies in managing complex oil and gas projects to capture growth opportunities in offshore wind area. Equinor is on the path to becoming a global offshore wind major.  Equinor reached several important milestones in offshore wind in 2019. Equinor and its partner SSE were awarded contracts to develop three large scale offshore wind projects in the Dogger Bank region of the North Sea. This will be the world's biggest offshore wind farm development with a total installed capacity of 3.6 GW. The projects are expected to produce enough energy to power the equivalent of 4.5 million UK homes. In addition, we secured a long-term offtake agreement for the strategically important Empire Wind (816 MW) project offshore New York.



		In 2019, Equinor reviewed its climate ambitions and launched a new Climate Roadmap at the Capital Markets Update on 6 Feb 2020. Equinor aims to grow renewable energy capacity tenfold by 2026, developing as a global offshore wind major.
Supply chain and/or value chain	Yes	In February 2020, Equinor launched new climate ambitions. A significant new development is the increased focus on how Equinor can help reduce emissions along the value chain. To this end, Equinor launched a new ambition to reduce the net carbon intensity of the energy we produce, from initial production to final consumption, by at least 50% by 2050,
		To achieve this, we will grow significantly in renewables and work with customers and society to develop new value chains for low carbon products such as CCS and Hydrogen – solutions that can help other industry sectors to decarbonise.
		Equinor has also engaged extensively with the maritime sector, where we have a role both as a fuel supplier and as a buyer of shipping services. In April 2020 Equinor launched new ambitions for our maritime operations: to reduce emission form our maritime operations by 50% by 2030, compared to 2005 level. As a supplier of fuel to the maritime sector, Equinor also aims to promote production and use of low-carbon fuels.
		Concretely, Equinor has worked systematically on reducing its carbon intensity by developing new types of vessels and using alternative fuels in close collaboration with the industry. We been a pioneer in using liquefied natural gas (LNG) as a fuel, and during 2021 we will introduce largescale use of liquefied petroleum gas (LPG) as a fuel.
		A new hybrid battery system has also been introduced for 19 supply vessels on contract with Equinor on the Norwegian Continental Shelf, and the next generation of dual-fuel vessels is being introduced to the fleet continuously. Equinor has also, in collaboration with the maritime industry, started developing the world's first supply vessel to run on zero-emission ammonia.
Investment in R&D	Yes	Technology and innovation are key enablers in addressing climate challenges. At Equinor, R&D investments are guided by our technology strategy. We take climate-related



		risks and opportunities into consideration when developing our technology strategy. Equinor's technology strategy sets the long-term direction for technology development in five key areas. "Low carbon solutions for oil & gas" and "Develop renewable energy opportunities" are two of them. Together, they support the execution of Equinor's "low carbon" strategy. Equinor aim to thrive in the energy transition. In particular, we aim to:  • maintain our position as one of the industry leaders in carbon efficient oil and gas production,  • grow in new energy solutions, and  • step up helping accelerating decarbonisation of society. In 2019, Equinor committed 20% of total R&D expenditure on low carbon technologies and energy efficiency projects, of which around 67% was spent on projects related to Carbon Capture and Storage and renewables. Equinor's ambition is to increase the share of R&D expenditure committed to energy efficiency and low carbon projects to 25% by 2020.
Operations	Yes	Equinor embeds climate considerations into our business strategy and decision making. Our efforts start with curtailing our own emissions in our operated oil and gas production.  In 2019, Equinor reviewed its climate ambitions and launched a new Climate Roadmap with a broad set of concrete ambitions at the Capital Markets Update on 6 Feb 2020. Equinor aims to reduce the CO2 intensity of our globally operated oil and gas production to below 8 kg Co2/boe by 2025, five years earlier than previously expected. To achieve this, we assess carbon intensity when we shape our portfolio and work on energy efficiency and emission reduction measures.  Equinor also aims to achieve absolute GHG emission cuts (without carbon offsets) of 40% by 2030, 70% by 2040 and near zero by 2050 in Norway, where the company has the majority of its operated O&G assets and hence direct GHG emissions. The company has already made significant investment decisions in 2019 to achieve this ambition.  We explore opportunities for further electrification of offshore fields. The Johan Sverdrup field came on stream powered by electricity from land, making it one of the most



carbon-efficient fields worldwide. Equinor and partners announced further plans to electrify the Utsira High area, where in total ten fields will receive power from shore, contributing to an average reduction of 1.2 million tonnes of CO2 per year.

Together with partners, Equinor sanctioned and submitted the Plan of Development for Hywind Tampen, a project that uses floating wind turbines to generate renewable electricity to supply two oil and gas fields in the Tampen area: Snorre and Gullfaks. Once completed, emissions from these two fields will be reduced by more than 200,000 tonnes per year.

In addition, we aim to strengthen our industry leading position on carbon efficient production, aiming to reach carbon neutral global operations by 2030.

#### 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	Capital expenditures Capital allocation Acquisitions and divestments Access to capital	At Equinor, we acknowledge climate science and have embedded climate considerations into our business strategy and financial planning process. We follow a set of financial principles that enables us to stay resilient in the long run.  Carbon price – In 2019 we continue to require all producing assets and non-sanctioned projects in all countries to include a carbon price in their investment case, with the aim to redirect investments towards assets that have a relatively low carbon intensity. In countries where there is currently no carbon price in place, we apply USD 55/tonne CO2. This is done to ensure that the asset will be resilient if a carbon price should be introduced. In countries where the current or predicted CO2 price is higher than USD 55/tonne, such as in Norway, where both a CO2 tax and the EU ETS apply, we use the expected CO2 price. We also test the sensitivity of a carbon price of USD 100/tonne to test the robustness of our assets.  This internal carbon price has been applied in Equinor for many years and we aim to continue to implement it in the long run. The predicted CO2 price (currently USD 55/tonne) is reviewed and updated



Portfolio – Climate risks and opportunities have impact on Equinor's portfolio. They have an impact on capital allocation to different type of projects and also opportunities. Our current portfolio is dominated by conventional oil and gas projects. In 2019, Equinor's production in conventional oil and gas, which have a relatively low carbon intensity compared to heavier segments, represent 86% of total production.

Capex – at the same time, Equinor's renewable production is increasing, and we believe it will continue to increase as we continue to further invest in the renewable business. In 2026, Equinor expects a production capacity from renewable projects of 4 to 6 GW, Equinor share, mainly based on the current project portfolio. This is around 10 times higher than today's capacity, implying an annual average growth rate of more than 30%. This means that towards 2023 we plan gross renewable investments of USD1.5-2.0 bn per year. We expect to reach our ambition of investing 15-20 % of total capex into renewable projects six years earlier than previously communicated. Towards 2035, Equinor expects to increase installed renewables capacity further to 12 to 16 GW, dependent on availability of attractive project opportunities.

To achieve the significant GHG emission reduction ambitions in Norway, we expect capital expenditures of around USD 5.7 billion (Equinor equity share around USD 2.3 billion).

## C3.1f

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

# 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.



#### Year target was set

2019

#### **Target coverage**

Country/region

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

Scope 1+2 (location-based)

#### Base year

2005

### Covered emissions in base year (metric tons CO2e)

13,078,000

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

91.9

#### Target year

2030

### Targeted reduction from base year (%)

40

# Covered emissions in target year (metric tons CO2e) [auto-calculated]

7,846,800

#### Covered emissions in reporting year (metric tons CO2e)

12,467,079

## % of target achieved [auto-calculated]

11.6784103074

#### Target status in reporting year

New

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

No, but we anticipate setting one in the next 2 years

## Please explain (including target coverage)

Absolute GHG reductions in Norway - 40% by 2030.

Equinor has launched new climate ambitions to reduce the absolute greenhouse gas emissions from its operated offshore fields and onshore plants in Norway by 40% by 2030, 70% by 2040 and to near zero by 2050. These new absolute emission targets replace the relative "CO2 emission reductions" target Equinor had previously.

By 2030 this implies annual emission reductions of more than 5 million tonnes, corresponding to around 10% of Norway's total CO2 emissions. A 40% reduction by 2030 is planned to be realised through large scale industrial measures, including energy



efficiency, digitalisation and the launch of several electrification projects at key fields and plants, including the Troll and Oseberg offshore fields and the Hammerfest LNG plant. The 2030 ambition is expected to require investments of USD 5-6 billion (NOK 50 billion) for Equinor and its partners.

## Target reference number

Abs 2

#### Year target was set

2019

#### **Target coverage**

Country/region

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

Scope 1+2 (location-based)

#### Base year

2005

#### Covered emissions in base year (metric tons CO2e)

13,078,000

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

91.9

## **Target year**

2040

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

70

#### Covered emissions in target year (metric tons CO2e) [auto-calculated]

3,923,400

#### Covered emissions in reporting year (metric tons CO2e)

12,467,079

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

6.6733773185

## Target status in reporting year

New

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

No, but we anticipate setting one in the next 2 years

## Please explain (including target coverage)



Absolute GHG reductions in Norway - 70% by 2040.

Equinor has launched new climate ambitions to reduce the absolute greenhouse gas emissions from its operated offshore fields and onshore plants in Norway by 40% by 2030, 70% by 2040 and to near zero by 2050. These new absolute emission targets replace the relative "CO2 emission reductions" target Equinor had previously.

A 40% reduction by 2030 is planned to be realised through large scale industrial measures, including energy efficiency, digitalisation and the launch of several electrification projects at key fields and plants, including the Troll and Oseberg offshore fields and the Hammerfest LNG plant.

Further reduction ambitions towards 70% in 2040 and close to zero in 2050 will entail additional measures, further electrification projects, consolidation of infrastructure as well as opportunities to develop new technologies and value chains. In 2050, Equinor expects Norwegian oil and gas production to be less than half of current levels, assuming development of the defined projects ahead of us, substantial efforts to increase production from existing fields and continued exploration.

#### Target reference number

Abs 3

Year target was set

2012

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1

Base year

2012

Covered emissions in base year (metric tons CO2e)

169,481

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

100

**Target year** 

2030

Targeted reduction from base year (%)

100

Covered emissions in target year (metric tons CO2e) [auto-calculated]



0

### Covered emissions in reporting year (metric tons CO2e)

355.376

## % of target achieved [auto-calculated]

-109.6848614299

#### Target status in reporting year

Underway

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

No, but we anticipate setting one in the next 2 years

#### Please explain (including target coverage)

Eliminate routine flaring by 2030.

We have set a company-wide upstream flaring intensity target of 0.2% by 2020 for our operated assets. This was set in 2012 as part of our commitment to the Sustainable Energy for All Initiative. Our aim is to eliminate routine flaring in our operations by 2030 at the latest, in line with the World Bank's Zero Routine Flaring by 2030 Initiative. In Norway we do not have routine flaring in our operations. We have been working systematically to reduce flaring on the Norwegian Continental Shelf (NCS) as well and have seen a positive trend. Reductions have been achieved mostly by changing our operating procedures, such as when starting a well, and due to hardware changes, for example the semi closed flare solution implemented at Statfjord C. We are also investigating reductions opportunities from increasing awareness by better monitoring of flare rates, tuning of separator pressure control and increasing the reliability of important rotating machinery.

We currently have flaring from the Mariner field due to gas production exceeding the need for power generation in the early production phase. After a few years, the field will use all its associated gas for energy production and flaring will be stopped. We expect Mariner to meet our commitment to the World Bank 2030 zero routine initiative.

We still have routine flaring in the Bakken due to challenges related to gas infrastructure. Production growth in this area has exceeded the midstream pipeline capacity, resulting in excess gas being sent to flare rather than to sales. Our Bakken team has identified several measures to reduce flaring. However, further improvement actions are required for Equinor to achieve its 2030 ambition of zero flaring from the Bakken field.

#### Target reference number

Abs 4

Year target was set

2020



#### **Target coverage**

Country/region

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

Scope 3: Upstream transportation & distribution

#### Base year

2005

#### **Covered emissions in base year (metric tons CO2e)**

986,274

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

25

#### Target year

2030

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

50

## Covered emissions in target year (metric tons CO2e) [auto-calculated]

493,137

# Covered emissions in reporting year (metric tons CO2e)

837,153

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

30.2392641396

#### Target status in reporting year

New

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

No, but we anticipate setting one in the next 2 years

## Please explain (including target coverage)

By 2030: 50% reduction of Equinor's maritime emissions in Norway vs 2005.

Equinor aims to fuel the decarbonisation of the maritime sector, utilising our unique position of buying, producing and selling lower and zero carbon fuels.

On the buyer side Equinor has set an ambition in line with Norway & IMO for the maritime services we purchase to strategically drive transition to zero carbon fuels:

- " By 2030: 50% reduction of Equinor's maritime emissions in Norway vs 2005.
- " By 2050: 50% reduction of Equinor's maritime emissions globally vs 2008 (IMO baseline).

Applicable for emissions from maritime vessels under contract with Equinor. The scope is all maritime emissions related to scope 3 categories 4 and 9 (upstream and



downstream transportation and distribution), and also scope 1 emissions for drilling rigs, floatels and Service Offshore Vessels for offshore wind activities.

#### Target reference number

Abs 5

## Year target was set

2020

### **Target coverage**

Company-wide

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

Scope 3 (upstream & downstream)

#### Base year

2008

## Covered emissions in base year (metric tons CO2e)

3.941.180

# 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 (%)

50

#### Covered emissions in target year (metric tons CO2e) [auto-calculated]

1,970,590

### Covered emissions in reporting year (metric tons CO2e)

3,941,939

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

-0.0385163834

#### Target status in reporting year

New

## Is this a science-based target?

No, but we anticipate setting one in the next 2 years

#### Please explain (including target coverage)

By 2050: 50% reduction of Equinor's maritime emissions globally vs 2008 (IMO baseline).



Equinor want to fuel the decarbonisation of the maritime sector. We will do this by utilising our unique position by buying, producing and selling lower and zero carbon fuels.

On the buyer side Equinor has set an ambition in line with Norway & IMO for the maritime services we purchase and strategically drive transition to zero carbon fuels:

- " By 2030: 50% reduction of Equinor's maritime emissions in Norway vs 2005.
- " By 2050: 50% reduction of Equinor's maritime emissions globally vs 2008 (IMO baseline).

Applicable for emissions from maritime vessels under contract with Equinor. The scope is all maritime emissions related to scope 3 categories 4 and 9 (upstream and downstream transportation and distribution), and also scope 1 emissions for drilling rigs, floatels and Service Offshore Vessels for offshore wind activities.

## 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

2017

#### **Target coverage**

Company-wide

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

Scope 1

#### Intensity metric

Metric tons CO2e per barrel of oil equivalent (BOE)

#### Base year

2016

#### Intensity figure in base year (metric tons CO2e per unit of activity)

9.8

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

67.1

#### Target year

2025



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

18

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]

8.036

% change anticipated in absolute Scope 1+2 emissions

-17.3

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year (metric tons CO2e per unit of activity)

9.5

% of target achieved [auto-calculated]

17.0068027211

#### Target status in reporting year

Underway

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

No, but we anticipate setting one in the next 2 years

#### Please explain (including target coverage)

Upstream CO2 intensity of 8 kg/boe within 2025.

Equinor aims to reduce the CO2 intensity of its globally operated oil and gas production to below 8kg CO2/boe by 2025, five years earlier than the previous ambition (Equinor operated assets 100% basis). The current global industry average is 18kg CO2/boe (IOGP). To achieve this, we assess carbon intensity when we shape our portfolio and work on energy efficiency and emission reduction measures.

Figures for change anticipated in absolute emissions in target year, are provided with the assumption of identical production levels in 2025 as in 2016. Scope 2 is not part of the assessment, since this is not part of the target.

#### Target reference number

Int 2

Year target was set

2019

#### **Target coverage**

Company-wide

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

Scope 1+2 (location-based) +3 (downstream)



#### Intensity metric

Other, please specify g CO2e per MJ energy produced

#### Base year

2019

Intensity figure in base year (metric tons CO2e per unit of activity)

68

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

100

#### Target year

2050

Targeted reduction from base year (%)

50

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]

34

% change anticipated in absolute Scope 1+2 emissions

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year (metric tons CO2e per unit of activity)

68

% of target achieved [auto-calculated]

0

Target status in reporting year

New

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

No, but we anticipate setting one in the next 2 years

## Please explain (including target coverage)

Reduce net carbon intensity by at least 50% by 2050.

While it is critical for Equinor to be at the forefront of the energy transition, we will only succeed if other industries, suppliers, governments and consumers come together to find common solutions. That is why Equinor is committed to taking tangible steps to contribute to accelerating decarbonisation. Our ambition to reduce net carbon intensity, of the energy we provide, including emissions from consumption, by at least 50% by 2050 is a platform for further collaboration with our stakeholders in finding solutions to



reducing emissions across the whole value chain. This target was developed throughout 2019 and formally launched early in 2020, as communicated in our Sustainability report for 2019.

Equinor defines net carbon intensity as follows: GHG emissions associated with the production and use of energy produced by Equinor, including negative emissions related to carbon services and offsets, divided by the amount of energy produced by the company (gCO2e/MJ). (Scope 1 and 2 GHG emissions (100% operator basis); Scope 3 GHG emissions from use of sold products (equity production); Energy production (equity); reference year 2019.).

It is not possible to provide an exact number for "% change anticipated in absolute Scope 1+2 emissions" or "% change anticipated in absolute Scope 3 emissions", due to the many potential levers which will have a combined impact: The scale and composition of our oil and gas portfolio, operational efficiency, energy production from renewables and growth in CCUS and hydrogen solutions.

A detailed description of the net carbon intensity indicator is available at Equinor.com.

#### Target reference number

Int 3

#### Year target was set

2019

#### Target coverage

Company-wide

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

Scope 1

#### Intensity metric

Other, please specify

Total methane emissions from our up- and midstream activities divided by the marketed gas, both on a 100 % operated basis.

#### Base year

2019

#### Intensity figure in base year (metric tons CO2e per unit of activity)

0.03

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

100

#### Target year

2030



## Targeted reduction from base year (%)

0

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]

0.03

% change anticipated in absolute Scope 1+2 emissions

0

% change anticipated in absolute Scope 3 emissions

33

Intensity figure in reporting year (metric tons CO2e per unit of activity)

0.03

% of target achieved [auto-calculated]

#### Target status in reporting year

New

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

No, but we anticipate setting one in the next 2 years

#### Please explain (including target coverage)

Keep methane emissions intensity at current low level, near zero by 2030.

Share of methane emissions from our up- and midstream activities per the marketed gas, both on a 100 % operated basis.

Assumes a base year of 2019 and a target year of 2030, as well as similar production levels and operational regions as today.

Methane is the second most important greenhouse gas contributing to human induced climate change. Equinor's methane intensity (operated) remained in 2019 very low at around 0.03%, which is significantly lower than the industry average of around 0.3% as measured by the Oil and Gas Climate Initiative (OGCI 2018 Annual Report). Equinor aims to continue to pursue an intensity ambition of "near zero". We will continue to develop and implement technologies and procedures to detect and reduce methane emissions, support industry efforts to reduce methane emissions across the oil and gas value chain, increase the quality and transparency of reported data, and support the development of sound methane policies and regulations.

#### C4.2

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

Target(s) to increase low-carbon energy consumption or production



## C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

#### Target reference number

Low 1

Year target was set

2020

**Target coverage** 

Business division

Target type: absolute or intensity

Absolute

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

Target denominator (intensity targets only)

## Base year

2019

Figure or percentage in base year

0.5

**Target year** 

2026

Figure or percentage in target year

5

Figure or percentage in reporting year

0.5

% of target achieved [auto-calculated]

0



#### Target status in reporting year

New

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

Yes. This renewable ambition will also contribute to achieve Equinor's ambition for a lowered net carbon intensity (see target "Int2").

## Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

#### Please explain (including target coverage)

Profitable growth in renewable energy: 4-6 GW installed capacity by 2026 (Equinor equity).

By 2026 Equinor expects to increase our share of installed capacity from renewable projects to between 4 and 6GW (Equinor equity), mainly based on the current project portfolio. This is around 10 times higher than today's capacity, implying an annual average growth rate of more than 30% in electricity production. Towards 2035, Equinor expects to increase installed renewables capacity further to between 12 and 16GW (Equinor equity), depending on availability of attractive project opportunities.

### Target reference number

Low 2

Year target was set

2019

#### **Target coverage**

**Business division** 

Target type: absolute or intensity

Absolute

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

Target denominator (intensity targets only)

Base year



2019

#### Figure or percentage in base year

0.5

#### **Target year**

2035

## Figure or percentage in target year

12

#### Figure or percentage in reporting year

0.5

# % of target achieved [auto-calculated]

0

#### Target status in reporting year

New

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

Yes. This renewable ambition will also contribute to achieve Equinor's ambition for a lowered net carbon intensity (Int 2).

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

No, it's not part of an overarching initiative

#### Please explain (including target coverage)

Develop a high value renewable business - 12-16 GW installed capacity by 2035.

By 2026 Equinor expects to increase our share of installed capacity from renewable projects to between 4 and 6GW (Equinor equity), mainly based on the current project portfolio. This is around 10 times higher than today's capacity, implying an annual average growth rate of more than 30% in electricity production. Towards 2035, Equinor expects to increase installed renewables capacity further to between 12 and 16GW (Equinor equity), depending on availability of attractive project opportunities.

## C-OG4.2c

(C-OG4.2c) Indicate which targets reported in C4.1a/b incorporate methane emissions, or if you do not have a methane-specific emissions reduction target for your oil and gas activities, please explain why not and forecast how your methane emissions will change over the next five years.

Equinor's methane ambition is to keep its methane emissions intensity near zero by 2030. Equinor's methane intensity (operated) performance has remained at a stable, very low level of around 0.03% for the past 3 years. This methane intensity is significantly lower than the industry average of around 0.3% as assessed by the Oil and Gas Climate Initiative (OGCI 2018 Annual Report). Equinor therefore aims to maintain a very low methane intensity over the coming years, while continuing to develop and implement technologies and procedures to detect and reduce methane emissions, as well as support industry efforts to reduce methane



emissions across the oil and gas value chain, increase the quality and transparency of reported data, and support the development of sound methane policies and regulations. Through the OGCI, Equinor is committed to supporting the OGCI in reaching its collective methane emissions target of 0.25% by 2025.

Methane emissions are also addressed in several of our other climate ambitions, including:

- Absolute GHG reductions in Norway 40% by 2030
- Absolute GHG reductions in Norway 70% by 2040
- Eliminate routine flaring by 2030
- Reduce net carbon intensity by at least 50% by 2050

# 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 CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	30	2,000,000
To be implemented*	2	300,000
Implementation commenced*	40	300,000
Implemented*	91	303,454
Not to be implemented	10	

#### 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 Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

1,962



#### Scope(s)

Scope 1

#### Voluntary/Mandatory

Voluntary

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

50,000

## Investment required (unit currency - as specified in C0.4)

300,000

#### Payback period

4-10 years

#### Estimated lifetime of the initiative

6-10 years

#### Comment

Energy efficiency measures at Kalundborg refinery. Denmark, such as installing frequency management control system to air blowers, change to LED lights, change of transformers, etc.

## Initiative category & Initiative type

Energy efficiency in production processes

Process optimization

### Estimated annual CO2e savings (metric tonnes CO2e)

59,806

#### Scope(s)

Scope 1

#### **Voluntary/Mandatory**

Voluntary

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

750,000

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

1,000,000

#### Payback period

1-3 years

#### **Estimated lifetime of the initiative**

6-10 years

#### Comment



Energy efficiency measures at the onshore gas treatment plants Kårstø and Kollsnes and the Mongstad refinery, all in Norway. measures such as reduced loading on gas turbines, modification of turbines es and heat systems, upgrade of isolation and utility system of boiler, etc

## Initiative category & Initiative type

Energy efficiency in production processes Process optimization

## Estimated annual CO2e savings (metric tonnes CO2e)

3,205

#### Scope(s)

Scope 1

## Voluntary/Mandatory

Voluntary

## Annual monetary savings (unit currency - as specified in C0.4)

1.000

## Investment required (unit currency - as specified in C0.4)

2,000

#### Payback period

1-3 years

## Estimated lifetime of the initiative

6-10 years

#### Comment

Energy efficiency measures at Peregrino, offshore Brazil

#### Initiative category & Initiative type

Other, please specify Other, please specify Flaring reduction

#### Estimated annual CO2e savings (metric tonnes CO2e)

25,000

#### Scope(s)

Scope 1

## **Voluntary/Mandatory**

Voluntary

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



200,000

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

500,000

## Payback period

1-3 years

#### Estimated lifetime of the initiative

3-5 years

#### Comment

Flaring reduction at Bakken, onshore shale USA.

## Initiative category & Initiative type

Energy efficiency in production processes Waste heat recovery

## Estimated annual CO2e savings (metric tonnes CO2e)

15,700

## Scope(s)

Scope 1

## Voluntary/Mandatory

Voluntary

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

1,000,000

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

2,000,000

### Payback period

1-3 years

## Estimated lifetime of the initiative

11-15 years

## Comment

Installation of waste heat recovery units on main power systems (diesel) on Transocean drilling rigs

## Initiative category & Initiative type

Other, please specify Other, please specify Flaring reduction



### Estimated annual CO2e savings (metric tonnes CO2e)

11,500

#### Scope(s)

Scope 1

#### **Voluntary/Mandatory**

Voluntary

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

800,000

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

400,000

#### Payback period

<1 year

#### Estimated lifetime of the initiative

6-10 years

#### Comment

Flaring reduction at platforms offshore Norway

#### Initiative category & Initiative type

Energy efficiency in production processes Machine/equipment replacement

## Estimated annual CO2e savings (metric tonnes CO2e)

35,000

#### Scope(s)

Scope 1

## Voluntary/Mandatory

Voluntary

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

2,450,000

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

5,000,000

## Payback period

1-3 years

#### Estimated lifetime of the initiative

11-15 years

#### Comment



New gear installed at gas injection compressor at Grane platform, modified gas compressor systems on Gullfaks C, offshore Norway

### Initiative category & Initiative type

Energy efficiency in production processes Process optimization

#### Estimated annual CO2e savings (metric tonnes CO2e)

151,256

#### Scope(s)

Scope 1

## Voluntary/Mandatory

Voluntary

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

10,600,000

## Investment required (unit currency - as specified in C0.4)

30,000,000

#### Payback period

1-3 years

#### Estimated lifetime of the initiative

6-10 years

#### Comment

Energy efficiency measures at several offshore platforms, Norway, such as modification of pumps, automation, upgrade of turbine inlet filters, installation of LED lights, changed operations, etc

#### Initiative category & Initiative type

Energy efficiency in buildings Heating, Ventilation and Air Conditioning (HVAC)

#### Estimated annual CO2e savings (metric tonnes CO2e)

70

#### Scope(s)

Scope 2 (location-based)

#### **Voluntary/Mandatory**

Voluntary

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

815,000



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

5,900,000

## Payback period

11-15 years

#### Estimated lifetime of the initiative

16-20 years

#### Comment

Energy efficiency measurements currently being implemented at Norwegian administration buildings during a period of 3 years. Energy consumption will be reduced by 12% when measures are implemented, amounting to total annual scope 2 CO2 savings of 80 tonnes per year. Investment required reflects total investments during the 3 years implementation period.

# C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Compliance with external requirements: Equinor's operations in Europe are subject to emissions allowances according to the EU Emissions Trading System (EU ETS). Equinor's Norwegian operations are subject to both the Norwegian offshore CO2 tax and EU ETS quotas. All operating fields and installations in Europe have a discharge permit and a permit for climate quota bound CO2 emissions given by national authorities. The permits include requirements i.a. on energy efficiency, energy management and use of Best Available Technology (BAT) (ref IPPC directive). Compliance with the requirements are followed up locally and are continuously being monitored by the authorities during frequent audits. In the US, the Environmental Protection Agency under the previous administration had taken steps to regulate greenhouse gas emissions under the Clean Air Act authority by proposing a Clean Power Plan (CPP). The current Administration proposed to reverse these regulations, and Equinor publicly opposed the proposed rollback. Despite current policy dnyamics, regulations on methane emissions in the USA could be revised over the next years with stricter requirements for existing emission sources. This could lead to increased costs for onshore shale activities. The exact impact is unknown and will depend on the nature of the regulations. Compliance with internal requirements: Requirements for use of BAT; minimum requirements for energy efficiency, non- production flaring or evaluation requirements for CO2 reduction projects are part of our corporate technical requirements/ corporate policies. Non-compliance with the internal requirement requirement and ispensation and a mitigation plan.



Dedicated budget for energy efficiency	Equinor's internal requirements demand that annual Energy Management Plans are established for each facility/installation. This plan should contain an energy efficiency target and the list of potential initiatives to achieve the target. When approved by the facility/installation manager, budget will be allocated. Plan and expenditure are closely monitored during the year.
Dedicated budget for low-carbon product R&D	Equinor's internal R&D expenditure has been approximately 300 million USD on average per year for the last three years. Equinor has a 2020 target of 25% of R&D funds to be used on low carbon and energy efficiency technologies. In 2019, such R&D costs represented 20% of the total R&D expenditure (See 2019 Sustainability report page 30).
	Equinor Technology Ventures supports small and medium enterprises (SMEs) with exciting new technologies in oil and energy—and in turn, helps Equinor be the world's most carbon-efficient oil and gas producer with a developing renewable business.
Employee engagement	During 2019, Equinor employees completed more than 3,800 sustainability related training sessions.
	Human rights: To build competence, human rights courses have been developed and conducted (2019: 400 employees completed full-day courses and more than 1,100 employees completed the e-learning). In addition; CEO microblogs, newsletters, info screens, videos on human rights.
	Climate: To help employees understand the climate challenge and Equinor's response, employees have been engaged: Climate courses (2019: More than 450 employees completed training) and discussion forums on climate (over 500 active members). In 2020, employees were engaged on the new climate roadmap: Climate roadmap brochure, virtual sessions with external experts, townhalls and team gatherings and the internal climate pages have been updated with infographics, videos, slides, speakers and brochures (2700+ site visits).
	Transportation: Equinor encourages cycling to work and arranges for Company buses for transportation between airport and offices to reduce use of individual taxi.
Internal price on carbon	Equinor considers the potential cost of a project's CO2 emissions in all investment decisions. We use an internal carbon price of USD 55 per tonne of CO2 (increased from UDS 50 in 2018) to all potential projects and investments after 2020. In countries where the actual carbon price is higher than USD 55 (e.g. in Norway), we use the actual price and predicted future carbon price in our investment analysis.



Internal incentives/recognition programs	Annual CEO Safety and Sustainability (SSU) Award.
Partnering with governments on technology development	The KonKraft initiative, with respect to the climate issue, is an industry led voluntary initiative in partnership with government to drive emission reductions in order to reach future anticipated regulatory requirements in Norway.  The Equinor Energy Ventures fund, dedicated to invest in attractive and ambitious growth companies in low carbon and new energy solutions, has been operating since February 2016. More than two-thirds of the original USD 200 million has been committed. The fund currently holds thirteen direct investments across different segments and is a limited partner to three financial venture capital funds on two different continents.  We collaborate with peers and business partners to find innovative
	and commercially viable ways to reduce emissions across the oil and gas value chain. We have teamed up with 12 peer companies in the Oil and Gas Climate Initiative (OGCI) to help shape the industry's climate response. To spur technology development, we are a partner in the USD +1 billion investment fund OGCI Climate Investment.
Marginal abatement cost curve	We have developed Marginal Abatement Curve for evaluating our emissions reduction projects across the company, considering equity, scale and economy. These provide a method of evaluating potential emissions reductions activities by comparing the largest equity CO2 reduction measures and other relevant factors.
Partnering with governments on technology development	Carbon capture, and storage (CCS) and hydrogen investment in CCS is vital to reduce emissions from oil and gas and other sectors. Equinor has been a pioneer in CCS. We have as an operator captured and stored more than 23 million tonnes of CO2 to date, and we have since 2012 operated a technology centre (Technology Centre Mongstad) for testing and developing carbon capture technologies. Now we are trying to develop new business models to make CCS commercially viable. Together with Total and Shell, Equinor is carrying out studies on behalf of the Norwegian authorities to develop full-scale CCS in Norway. The concept includes capturing CO2 from onshore industry, transporting it by ships and injecting and permanently storing it 1,000-2,000 meters below the seabed.
Other  Decarbonisation through use of hydrogen	Combined with our strong position in natural gas, Equinor is prepared for future growth in hydrogen, which offers large-scale opportunities for zero emission energy while leveraging existing infrastructure. By removing CO <sub>2</sub> from natural gas, Equinor can produce emission-free hydrogen that can be used in industrial settings, such as power



generation and marine fuels as well as residential ones, such as heating. Equinor is currently involved in several hydrogen pilots and projects, such as Zero Carbon Humber in the UK, where we are exploring how hydrogen can help decarbonise the largest industrial cluster in the country.

## 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**

Low Carbon Electricity (Offshore wind). Currently we focus on developing offshore wind parks (bottom fixed and floating). Our operated wind farms in the UK Sheringham Shoal, Dudgeon, and Hywind Scotland) provide renewable energy to ~650.000 households. We are also a partner in Arkona offshore windfarm in Germany, which delivers energy to ~400.000 households.

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

Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

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

0

#### Comment

The past few years have been transformational for Equinor's offshore wind portfolio. With the recent additions of Dogger Bank (UK) and Empire Wind (US), we are on the path to becoming a global offshore wind major. Dogger Bank will be the world's largest offshore wind farm development and Empire Wind will provide renewable electricity to the equivalent of one million homes in New

York City. Equinor has reached several important milestones in offshore wind in 2019:

- Secured a 20-year offtake agreement for the strategically important Empire Wind (816 MW) project offshore New York City.



- Achieved scale in development of a North Sea offshore wind cluster through the award of the 3.6GW Dogger Bank project together with SSE, and by securing the area for potential extension of Sheringham Shoal and Dudgeon windfarms in the UK.
- Partially farmed-down the Arkona asset, demonstrating value creation and portfolio optimisation through valuable partnerships.
- Signed Memorandum of Understandings with Korea National Oil Corporation (KNOC) and China Power International Holding (CPIH) to cooperate on development of offshore wind.

Up to 80% of the world's offshore wind potential will likely require floating solutions and Equinor is well positioned to industrialise floating wind. Our ambition is to bring floating wind towards commerciality by 2030. In 2019. the pioneering Hywind Tampen project was sanctioned, having received USD 261 million in support from Enova. In addition to delivering CO<sub>2</sub> reductions, this project will be a key driver of technology development and the journey to scale and improved competitiveness for floating wind.

We are also engaged on the owner side with a 50% share of the 162MW Apodi solar production asset in Brazil, and a similar share of the 117MW Guanizul IIA solar project in Argentina that is currently under construction. Both assets are operated by Scatec Solar. In 2019, Equinor increased its total shareholding in Scatec Solar to 15.2%.

Currently Equinor does not publish revenues specific for our New Energy Solutions Business Area.

#### Level of aggregation

Product

#### **Description of product/Group of products**

Norwegian natural gas accounts for more than 20 % of Europe's total natural gas consumption. In 2019 Equinor exported about two-thirds of Norwegian gas to Europe. Equinor's export of gas to Europe varies from year to year but is in the order of 400 TWh. This excludes gas that Equinor sells on behalf of others such as the Norwegian state. A significant amount of the gas that Equinor sells to Europe is used in the power sector, potentially replacing coal. A coal fired power plant emits more than twice as much CO2 per kWh electricity as a gas fired power plant. Natural gas therefore plays an important role in reducing power sector emissions in Europe. Theoretically natural gas could reduce CO2 emissions in Germany alone by as much as 280 million tonnes if all lignite and coal power plants were substituted with gas power plants (that would amount to more than 25% reduction in total German CO2 emissions). Assuming that the share of Equinor's gas used for power generation is around 25%, this amounts to 100 TWh. 100 TWh gas can generate 50 TWh of power with emissions of around 20 million tonnes. To generate a similar amount of power from coal, emissions would have been 45 million tonnes, giving savings of around 25 million tonnes. Natural gas also contributes to reduce emissions in other sectors. The remaining gas sold by Equinor, 300 TWh, can be assumed to be used for heating or in industry. When combusted, this gas will emit around 60 million tonnes of CO2.



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

Avoided emissions

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

Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

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

18

#### Comment

Percentage derived from Equinor's Annual report and Form 20-F: "Revenues from contracts with customers, and other revenues".

#### Level of aggregation

**Product** 

#### **Description of product/Group of products**

Low Carbon Product:

Hydrogen to enable clean flexible power generation

# 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

Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

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

0

#### Comment

Combined with our strong position in natural gas, Equinor is prepared for future growth in hydrogen, which offers large-scale opportunities for zero emission energy while leveraging existing infrastructure. By removing CO<sub>2</sub> from natural gas, Equinor can produce emission-free hydrogen that can be used in industrial settings, such as power generation and marine fuels as well as residential ones, such as heating. Equinor is currently involved in several hydrogen pilots and projects, such as Zero Carbon Humber in the UK, where we are exploring how hydrogen can help decarbonise the largest industrial cluster in the country.

#### Level of aggregation

**Product** 

#### **Description of product/Group of products**



#### **CCUS**

As a leader in CCUS, Equinor is working to build a European value chain, capturing and storing CO<sub>2</sub> from industrial plants that have CO<sub>2</sub> as a by-product, for example waste management facilities and cement producers. The Norwegian government is a key partner and has also set the ambition to develop a full-scale CCUS value chain in Norway by 2024. We are currently involved in the Northern Lights project, together with Shell and Total, which includes the transport and permanent storage of CO<sub>2</sub> in a safe reservoir in the North Sea. Northern Lights is part of the Norwegian Government's "Full-scale value chain in Norway" demonstration project. In 2019, Equinor has on behalf of the partners signed memorandas of understanding (MoUs) with seven European companies to develop value chains in carbon capture and storage. At the end of 2019, the partnership drilled a confirmation well to study the reservoir's suitability and capacity for CO<sub>2</sub> storage. The partners are currently reducing costs and further developing the Northern Lights project, aiming for an investment decision in 2020.

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

Avoided emissions

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

Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

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

#### Comment

Currently Equinor does not publish revenues specific for our New Energy Solutions Business Area.

## C-OG4.6

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

We develop and implement technologies and procedures to detect and reduce methane emissions, support industry efforts to reduce methane emissions across the oil and gas value chain, increase the quality and transparency of reported data, and support the development of sound methane policies and regulations. We calculate the abatement cost and emission reduction potential in CO2e to help assess and prioritise methane emission reduction opportunities. Quantifying and assessing mitigation opportunities for methane emissions is a key priority for Equinor. Using our US operations as an example, several years ago, we implemented a leak detection and repair program for our onshore US assets, utilizing infrared cameras to sniff out (identify) emissions sources. We then expanded our leak detection program with drone mounted laser sensors to support our mitigation efforts. This improved our assessment capabilities and allowed Equinor to prioritize higher emitting sources and more cost-effectively eliminate leaks. As a result, Equinor lowered its US onshore emissions 80% between 2014 and 2018, and we maintained this low level also in 2019.



In Norway, since 2014, Equinor has worked together with industry and the environmental regulator, on projects to improve our understanding of methane emission sources – initially in upstream production operations, and more recently in land-based refining and processing activities. Through these projects, an improved understanding of direct methane emission sources, quantification methodologies and abatement opportunities has been achieved. As a result of the offshore-focused project, the emission quantification methodologies used for regulatory reporting have been updated. These updates have increased the precision in our methane quantification and resulted in an approx. 50% reduction in reported methane emissions from direct sources in our NCS operations. A similar quantification methodology improvement process was undertaken in 2017 and 2018 for land-based plants in Norway. Using the most appropriate, source-specific methane emissions figures allows us to evaluate and prioritize potential emission reduction opportunities.

A 2017 review of Equinor's reported emissions and third-party studies has demonstrated that methane emissions in the gas value chain from Norway to Europe (including transportation and distribution) are at a level where the advantage of gas compared to coal from a climate perspective is indisputable. According to the review, methane emissions related to distribution to the final consumer represent over 90% of the methane emissions to European customers.

Equinor also supports methane emission reductions within the oil and gas industry, as a member of several collaborative initiatives to reduce methane emissions through voluntary programs (including the One Future Coalition, the Climate and Clean Air Coalition Oil and Gas Methane Partnership and the Methane Guiding Principles). Some of the most relevant initiatives and associated key activities undertaken in 2019 are described below.

In response to the (former) Obama Administration's increased focus on methane emissions in the US, Equinor has been actively engaged by: (1) evaluating operational aspects and implementing reduction measures for our US onshore assets, and (2) engaging with industry and the Administration regarding the development of a voluntary program.

#### Submissions:

- 1) Equinor submitted in 2019 our views on US methane regulations and policy measures directly to the US Environmental Protection Agency (EPA).
- 2) Equinor submitted in 2019 detailed methane mitigation opportunity evaluations which were utilised by the Norwegian authorities as part of the Klimakur 2030.
- 3) Equinor has also submitted our views on methane regulations and policy measures directly to the EU Commission.
- 4) Equinor, together with 9 other companies and organisations, submitted a joint recommendation to the EU Commission on methane policy measures for EU.

# 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.

In the paragraphs below we describe how the concept of LDAR is practiced across Equinor's operations. Still, we want to emphasize that LDAR (Leak Detection and Repair) is a generic concept which is open to interpretation.

For our upstream, offshore production operations on the Norwegian Continental Shelf and our processing and refining activities in Norway and Denmark, leak detection is carried out using a variety of technical and operational solutions, including e.g. pressure monitoring in pressurized systems, stationary gas detection and regular inspection routines. Stationary gas detection is typically implemented through the installation of IR detectors. Open path / line detectors are used to increase the detection probability of small leaks. Safety critical valves are checked for leakages using nitrogen after actuation and shut-downs.

When it comes to leak detection and repair activities, specifically, for our upstream, offshore-, as well as mid-stream-, operations fugitive hydrocarbon emissions are monitored as a part of the regular routines. Each plant/installation is required to define the interval for monitoring of fugitive hydrocarbon emissions, at least once a week. In addition, comprehensive, plant/installation-wide OGI inspections using IR cameras represent a highly standardized LDAR activity, which complements existing identification and control methods.

Many installation-wide OGI inspections have been conducted on our NCS assets over the last several years, with each installation subjected to a comprehensive baseline inspection in 2016 or 2017. Nearly all of our installations on the NCS are subject to annual OGI-inspections. For our larger installations, these inspections may take several days to complete, as all areas and equipment containing hydrocarbons is inspected. Minor leakages that can be fixed "on the spot" are, and each plant maintains a log for fugitive hydrocarbon emissions, where the leakage is described (location, tag numbers, etc.). Necessary actions (corrective maintenance, limitation of nearby activity, shut-down etc.) are considered based on size and development of the leakage. When the leakage has been repaired it is signed out of the log for fugitive emissions and tags are removed. The log for fugitive hydrocarbon emissions shall be updated after performed measurements. Leakages above a specific threshold level are also registered and followed-up in our safety incident management tool, Synergi.

The use of infrared camera technology has been widely adopted at our mid-stream facilities in Norway, with plant-wide inspections carried out by third-party specialists. In addition, some Equinor plant personnel have been trained in the use of IR cameras and utilized these for both planned and ad hoc emission surveys and leak identification activities.

Equinor's US equity production accounted in 2019 for around 20% of Equinor's total equity production. For our US onshore activities, LDAR programmes, in addition to other routine operations and maintenance activities, are also in place to monitor the integrity and functionality



of oil and gas processing equipment and emissions sources to ensure that emissions remain low. Emission reduction programs aimed at finding and fixing leakages have been implemented. The use of IR cameras and drone mounted laser sensors are used to support in the identification of emission sources. These programs have prioritized focus on emission sources found from experience to be most relevant to our particular operations, e.g. storage tanks in the Bakken and pneumatic devices in the Eagle Ford.

The use of IR cameras as an additional element in our leak detection and repair routines has allowed us to better understand and quantify identified emissions, as well as evaluate mitigation opportunities. This has, in the case of our US onshore operations enabled Equinor to lower methane emissions from these operations by 80% between 2014 and 2018, and we maintained this low level also in 2019.

It is also relevant to note that in our US operations, we have recently also added optical path laser spectroscopy (OPLS), a cutting-edge technology, to our suite of methane detection and repair measures for our US shale gas operations. This has been used to establish methane baselines through detection and quantification of methane emissions from multiple sources. The methane sensor is mounted on a drone which enables assessment of individual leaks from specific equipment types as well as total emissions from an entire facility. The OPLS data collected in 2017, 2018 and 2019 indicates that measured methane emissions are lower than the EPA Subpart W calculated emissions. Further work is ongoing to validate the methodology for reporting measured methane emissions at operations level in the USA.

## 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.

Flaring is relevant for Equinor's oil and gas production activities, both onshore and offshore. In Norway, regulation prohibiting flaring as a disposal solution for associated gas (i.e. continuous production flaring) and high CO2 tax has contributed to the relatively low levels of flaring in our upstream operations compared to the industry average. All upstream offshore installations have developed flaring strategies, which describe how process disruptions shall be handled, e.g. how fast oil producers with associated gas should be shut down (after 1 hour, 2 hours, 5 hours, etc), if the gas export/injection compressors should fall out. Improved tools (e.g. digitalization and visualization) have also made it easier for operational personnel to follow up the flaring, and flaring results are on the agenda together with production results in daily and weekly operations meetings. A proactive approach to flaring management has resulted in a reduction of CO2 emissions from flaring, in our NCS activities, from ca. 1.2 million tonnes in 2008 to just under 425 thousand tonnes in 2019 (even with production level being comparable for 2008 and 2019).

To achieve our emission reduction target, we pursue energy efficiency measures, electrification and other low-carbon energy sources at our installations. We have set a company-wide upstream flaring intensity target of 0.2% by 2020 for our operated assets. This was set in 2012 as part of our commitment to the Sustainable Energy for All Initiative. Our aim is to stop routine flaring in our operations by 2030 at the latest, in line with the World Bank Zero Flaring by 2030



initiative. In Norway, we do not have routine flaring in our operations. We are also committed to working actively to help achieve the same objective in our partner-operated assets. Our 2019 flaring intensity (upstream, operated) increased slightly from 2.4 to 2.5 tonnes/1000 tonnes of hydrocarbons produced, slightly above the 2020 target of 0.2%. This is significantly lower than the industry average of 1.1%. The increase in 2019 was caused mainly by a flaring increase at Bakken due to lack of infrastructure capacity to offtake associated gas.

# C5. Emissions methodology

# C5.1

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

### Scope 1

## Base year start

January 1, 2007

#### Base year end

December 31, 2007

## Base year emissions (metric tons CO2e)

15,222,876

Comment

#### Scope 2 (location-based)

## Base year start

January 1, 2007

#### Base year end

December 31, 2007

#### Base year emissions (metric tons CO2e)

106,674

Comment

#### Scope 2 (market-based)

#### Base year start

January 1, 2007



#### Base year end

December 31, 2007

## Base year emissions (metric tons CO2e)

1,687,512

#### 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

Canadian Association of Petroleum Producers, Calculating Greenhouse Gas Emissions, 2003 Energy Information Administration 1605B

Environment Canada, Sulphur hexafluoride (SF6) Emission Estimation and Reporting Protocol for Electric Utilities

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations

IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011 ISO 14064-1

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

The Greenhouse Gas Protocol: Scope 2 Guidance US EPA Mandatory Greenhouse Gas Reporting Rule Other, please specify See 5.2a

## C5.2a

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

- Norwegian Oil and Gas Association (NOROG) Guideline for annual emissions and discharge report
- EU Emission Trading Scheme- Brazil National/Local reporting requirements (IBAMA)
- Norwegian Directorate of Tax and Excise emissions of NOx ISO standard ISO 6976
- Calculation of heating values, density, relative density and Wobbe ISO 6976
- US EPA Technology Transfer Network Clearinghouse for Inventories and Emissions Factors, Emission Factors and AP42, Fifth Edition
- European Commission (EC) Eurostat: EC Statistics2006 IPCC Guidelines for Natural Greenhouse Gas Inventories
- US Energy Information Administration
- eGRID Web (Emissions and Generation Resource Integrated Database)
- European Residual Mixes 2018, AIB



# C6. Emissions data

## C<sub>6</sub>.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

#### Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

14.719.266

Comment

## 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 are reporting a Scope 2, market-based figure

#### Comment

Location based Scope 2 emissions are calculated using available regional emissions factor (kg CO2/MWh) for the physical mix available on the local/regional grid. Market based Scope 2 emissions are calculated using AIB residual mixes 2018 (kg CO2/MWh) for countries where GoO (Guarantees of Origin) mechanisms are implemented. For countries without GoO mechanisms, physical mix is used. Available factors do not take CH4 contribution into account.

## C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

#### Reporting year

Scope 2, location-based

215,474

Scope 2, market-based (if applicable)

2,911,766

Comment



## C<sub>6.4</sub>

(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?

Yes

### C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

#### Source

Scope 2 CH4 from all operations.

#### Relevance of Scope 1 emissions from this source

No emissions excluded

#### Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

#### Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

#### Explain why this source is excluded

The company is working on incorporating the Scope 2 emissions of CH4 into the environmental accounting system, now that these emissions factors are becoming more available. However, although they are part of our emissions picture, their contribution to the overall Scope 2 figure will be negligible compared to CO2 from imported energy. A sensitivity analysis performed for 2019 showed that the Scope 2 emissions (location based), expressed as CO2e, increased by 0,03% by including CH4. For the market-based Scope 2 calculations, the figure increased by 0,1%.

#### C6.5

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

#### Purchased goods and services

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

This Scope 3 category "Purchased goods and services" is currently being evaluated by the company. Initial reviews indicate that the contribution from this category is negligible



compared to our most material category "Use of sold products". However, it is still important to address in terms of expectations to suppliers, as part of our commitment to accelerate decarbonisation of other sectors through engagement.

### Capital goods

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

1,700,000

#### **Emissions calculation methodology**

Purchased quantities of steel and cement, and relevant emissions factors.

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

100

#### Please explain

The estimate provided for capital goods is based on the most carbon intensive industry sectors - steel and cement. For cement, all activities associated with drilling and well and renewables equipment and construction are included for 2019. For steel, the scope covers offshore construction, which is the most significant category. The full scope of cement and steel procurement is not covered, so this must be considered a partial estimate based on materiality.

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

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

We are an energy company with oil and gas in our portfolio, and our energy demand is mostly covered by our own fuels, or by electricity. These emissions are already accounted for in Scope 1 and Scope 2. Some of the diesel is purchased. In 2019, our Scope 1 CO2 emissions from diesel were just over 1 million tonnes. The upstream emissions from the fraction of the diesel that was purchased is therefore negligible (less than 0,1%) compared to our most material category - "Use of sold products".

#### **Upstream transportation and distribution**

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

200.000

#### **Emissions calculation methodology**



Emissions calculated by a combination of supplier information, distance travelled, number of wellpads and quantities of transported hydrocarbons (unconventionals), vehicle information, flight information and emissions factors.

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

50

#### Please explain

Upstream transportation and distribution covers transport on road, rail and air. The major contribution is from transportation of waste and water at our US onshore operations, and also the transportation of hydrocarbons by rail at the same locations. Courier services between supply bases in Norway is also a large contributor, and it is included in the figures.

The figures are from 2018, but the activity levels and emissions in 2019 are comparable so the stated 2018 figure is a good estimate also for 2019.

Please note that the rail emissions and helicopter emissions included in this figure should technically be allocated to the downstream transportation and distribution, and employee commuting categories, respectively, but it is included here since the company tracks the Scope 3 categories by specific segments (road/rail/air/maritime, etc).

# Waste generated in operations

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

The main emissions contribution from waste generated in operations is from the trucking of waste at our US onshore operations. This is covered under the category "upstream transportation and distribution". Similarly, the transportation of waste from offshore facilities is covered under maritime emissions in the "downstream transportation and distribution" category. Waste in non-US locations is generally transported to local facilities and managed there, making resulting emissions non-material compared to other categories.

In 2019, about 10 000 tonnes of generated waste from Equinor was incinerated at waste management facilities. If we assume an emissions factor or 500 kg CO2/tonnes, this amounts to about 5000 tonnes of CO2 in total, which is also immaterial in our Scope 3 context.

#### **Business travel**

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**



103,459

#### **Emissions calculation methodology**

The emission factors are set by the UK Department of Business, Energy and Industrial Strategy. UK Government GHG Conversion Factors for Company Reporting:https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016

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

100

#### Please explain

Scope 3 emissions from business travel is based on the carbon report from our business travel provider for domestic, continental and intercontinental travel in 2019.

# **Employee commuting**

#### **Evaluation status**

Not relevant, calculated

# **Metric tonnes CO2e**

50,000

# **Emissions calculation methodology**

Assume that a car emits 200 g CO2/km.

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

0

#### Please explain

There are about 20 000 employees in Equinor, and if we use the conservative assumption that all employees drive their own car 50 km every day to get to work and that there are 250 work days in one year, then the commuting travel will emit 20 000\*250\*50\*200=50 000 tonnes CO2 per year. By this assumption, none of the employees travel by public transportation.

The emissions are still negligible compared to our other more material Scope 3 categories, and the commuting therefore considered not relevant.

Please note that helicopter commuting is included in the upstream transportation and distribution category.

#### **Upstream leased assets**

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain



Equinor has no upstream leased assets within our Scope 3 boundary which are not already covered by other categories.

# Downstream transportation and distribution

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

3.941.939

# **Emissions calculation methodology**

Emissions calculated by using number of voyages or operations, distance travelled, and/or fuel consumption data.

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

80

#### Please explain

The stated figure is emissions from the company's maritime activities. The main contributor is oil tankers, which is part of the downstream transportation and distribution category. Other types of activities such as supply vessels, construction vessels etc., which are considered upstream activities in this context, are also included. The figures are reported together. Please note that the figures are 2018 figures, and they should be considered an estimate for 2019.

# **Processing of sold products**

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

6,000,000

#### **Emissions calculation methodology**

Data (kg CO2e emitted / boe of throughput) from Equinor's own refineries is used as basis for calculating emissions associated with the processing of sold products. The calculation is based upon Equinor's equity production volumes, utilizing a conservative refining emissions factor. Crude oil volumes processed at Equinor-operated refineries are subtracted from the total equity volume figure used in the calculation. This is done, as emissions from Equinor-operated refineries are already included as part of Equinor's Scope 1 emissions figure. The reported "Processing of sold products" scope 3 emissions, are at the same time scope 1 emissions for third party refineries.

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

0



#### Please explain

# Use of sold products

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

247,000,000

# **Emissions calculation methodology**

Based on sold hydrocarbons, IEA statistics and IPCC emissions factors.

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

0

# Please explain

The calculations take into account sold hydrocarbons, statistical assumptions on final products and applicable emission factor per product.

# End of life treatment of sold products

#### **Evaluation status**

Not evaluated

# Please explain

The "End of life treatment of sold products" category is currently being estimated and assessed for materiality.

#### **Downstream leased assets**

#### **Evaluation status**

Not relevant, explanation provided

# Please explain

Equinor has no downstream leased assets within our Scope 3 boundary which are not already covered by other categories.

#### **Franchises**

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

Equinor has no franchises.

# Investments

#### **Evaluation status**

Not relevant, explanation provided



#### Please explain

Equinor has no investments within our Scope 3 boundary which are not already covered by other categories.

#### Other (upstream)

#### **Evaluation status**

Not relevant, explanation provided

# Please explain

Equinor has not identified other upstream Scope 3 emissions which are not covered by the other categories listed.

# Other (downstream)

#### **Evaluation status**

Not relevant, explanation provided

# Please explain

Equinor has not identified other downstream Scope 3 emissions which are not covered by the other categories listed.

# **C6.7**

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

No

# C<sub>6</sub>.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

#### **Intensity figure**

232

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

14,934,740

#### **Metric denominator**

unit total revenue

Metric denominator: Unit total

64,357

Scope 2 figure used



#### Location-based

#### % change from previous year

22

# **Direction of change**

Increased

# Reason for change

The main driver for the increase in intensity was lower gas export, and hence lower income, due to unfavourable market conditions and price optimization. While Scope 1 and 2 emissions decreased in 2019 compared to 2018 from 15.1 mill tonnes CO2 eq to 14.9 mill tonnes CO2 eq, total revenues and other income decreased more (denominator) due to lower gas sales/prices. Total revenues and other income has decreased from 79,593 mill USD in 2018 to 64,357 mill USD in 2019.

Please note that this indicator will be influenced by fluctuating oil and gas prices which contribute to large variations in revenues from year to year. As such it might not be considered a meaningful intensity figure for oil and gas companies due to the price volatility.

Also, to be meaningful this indicator should use equity-based emissions, because revenues are based on equity. However, we report here on operated assets as according to the CDP guideline. Source:

https://www.equinor.com/en/investors.html#annual-reports

#### **Intensity figure**

9.93

# Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

10,000,058

#### **Metric denominator**

Other, please specify mboe

#### Metric denominator: Unit total

1,006,709

# Scope 2 figure used

Location-based

#### % change from previous year

5

# **Direction of change**

Increased



# Reason for change

The scope of this intensity is limited to the upstream segment.

The main drivers for the increase in intensity are low gas export levels from one asset, particularly in Q32019. The lowered gas export levels are mainly a consequence of unfavorable market conditions and price optimization.

# C-OG6.12

(C-OG6.12) Provide the intensity figures for Scope 1 emissions (metric tons CO2e) per unit of hydrocarbon category.

# Unit of hydrocarbon category (denominator)

Other, please specify

Thousand barrels of marketed hydrocarbon

# Metric tons CO2e from hydrocarbon category per unit specified

9

#### % change from previous year

3

#### Direction of change

Increased

#### Reason for change

Conventional Oil and gas segment:

The CO2e intensity of the Conventional Oil and gas segment has increased from 8.7 tonnes CO2e per mBOE in 2018 to 9.0 tonnes CO2e per mBOE in 2019.

The CO2 intensity has increased by 3% since 2018. The main driver is lower gas export levels, market conditions and turnaround in August and September.

About 214 000 tonnes of CO2 emissions reductions initiatives were implemented in the conventional oil & gas segment for 2019.

#### Comment

# Unit of hydrocarbon category (denominator)

Other, please specify

Thousand barrels of marketed hydrocarbon

# Metric tons CO2e from hydrocarbon category per unit specified

9.7

# % change from previous year



6

#### **Direction of change**

Increased

# Reason for change

Shale gas segment: The CO2e intensity of the Shale Gas segment has increased from 9.1 tonnes CO2e per mBOE in 2018 to 9.7 tonnes CO2e per mBOE in 2019.

The intensity has increased by 6%. The main driver is increased CO2 emissions due to new compressors coming into operation at one asssets. The new compressors are highly efficient, which has simultaneously led to less flaring. There is also a slight reduction in production from the Shale Gas segment.

#### Comment

# Unit of hydrocarbon category (denominator)

Other, please specify

Thousand barrels of marketed hydrocarbon

# Metric tons CO2e from hydrocarbon category per unit specified

19.8

#### % change from previous year

5

#### Direction of change

Increased

# Reason for change

LNG segment: The CO2e intensity of the LNG segment has increased from 18.8 tonnes CO2e per mBOE in 2018 to 19.8 tonnes CO2e per mBOE in 2019.

The increase in CO2 intensity is due to increased CO2 levels in Q12019 and Q32019 as a consequence of high flaring during start-up after shutdowns, and increased use of turbines due to reduced access to power supply from the grid.

# Comment

# Unit of hydrocarbon category (denominator)

Other, please specify

Thousand barrels of marketed hydrocarbon

#### Metric tons CO2e from hydrocarbon category per unit specified



23

#### % change from previous year

2

# **Direction of change**

Increased

# Reason for change

Tight oil segment: The CO2e intensity of the Tight oil segment has increased by 2%, from 22.7 tonnes CO2e per mBOE in 2018 to 23.0 tonnes CO2e per mBOE in 2019.

There is a significant increase in CO2 from flare in 2019. This is due to increased flaring volumes as sales line capacity has decreased, but also new wells on line. This is associated with regional pipeline constraints.

#### Comment

# Unit of hydrocarbon category (denominator)

Other, please specify

Thousand barrels of marketed hydrocarbon

#### Metric tons CO2e from hydrocarbon category per unit specified

25.4

# % change from previous year

19

#### **Direction of change**

Increased

# Reason for change

Heavy oil segment: The CO2e intensity of the Heavy Oil segment has increased from 21.3 tonnes CO2e per mBOE in 2018 to 25.4 tonnes CO2e per mBOE in 2019.

The increase in intensity is due to preparation and start-up of a new field.

#### 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 Midstream

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

0.03

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

0.15

#### Comment

The unit for the intensity related to the total hydrocabon production (0,15%) is tonnes/tonnes.

The unit for the intensity related to gas production (0,03%) is m3/Sm3. The reason for the difference in unit is to align the latter figure with the OGCI approach, and also our reported methane intensity in Equinor's 2019 annual sustainability report.

# 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 CO2e)	GWP Reference
CO2	14,245,449	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	473,817	IPCC Fifth Assessment Report (AR5 – 100 year)

# 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**

Oil

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

3,891,977

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

1,339

# Total gross Scope 1 emissions (metric tons CO2e)

3,925,453

#### Comment

The allocation of emissions to oil and gas is performed by multiplying the emissions from each business segment with the respective fraction (%) oil and gas in the production mix.

# **Emissions category**

Combustion (excluding flaring)

#### Value chain

Upstream

#### **Product**

Gas

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

4,676,604

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

1,773

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

4,720,933

#### Comment

The allocation of emissions to oil and gas is performed by multiplying the emissions from each business segment with the respective fraction (%) oil and gas in the production mix.

#### **Emissions category**

Combustion (excluding flaring)



#### Value chain

Downstream

#### **Product**

Unable to disaggregate

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

3,832,034

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

101

# Total gross Scope 1 emissions (metric tons CO2e)

3,834,568

#### Comment

The allocation of emissions to oil and gas is performed by multiplying the emissions from each business segment with the respective fraction (%) oil and gas in the production mix.

#### **Emissions category**

Combustion (excluding flaring)

#### Value chain

Other (please specify)
NES

#### **Product**

Unable to disaggregate

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

9,341

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

0

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

9,341

#### Comment

Combustion related to offshore wind power segment.

# **Emissions category**

Flaring

#### Value chain

Upstream



#### **Product**

Oil

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

486,778

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

802

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

506,816

#### Comment

The allocation of emissions to oil and gas is performed by multiplying the emissions from each business segment with the respective fraction (%) oil and gas in the production mix.

# **Emissions category**

Flaring

#### Value chain

Upstream

#### **Product**

Gas

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

526,728

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

721

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

544,743

#### Comment

The allocation of emissions to oil and gas is performed by multiplying the emissions from each business segment with the respective fraction (%) oil and gas in the production mix.

# **Emissions category**

Flaring

#### Value chain

Downstream

#### **Product**

Unable to disaggregate



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

206,638

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

201

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

211,658

Comment

# **Emissions category**

**Fugitives** 

#### Value chain

Upstream

# **Product**

Oil

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

0

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

5,083

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

127,066

#### Comment

The allocation of emissions to oil and gas is performed by multiplying the emissions from each business segment with the respective fraction (%) oil and gas in the production mix.

# **Emissions category**

**Fugitives** 

# Value chain

Upstream

#### **Product**

Gas

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

Λ

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



3,946

# Total gross Scope 1 emissions (metric tons CO2e)

98,641

#### Comment

The allocation of emissions to oil and gas is performed by multiplying the emissions from each business segment with the respective fraction (%) oil and gas in the production mix.

# **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)**

4,988

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

124,705

#### Comment

# **Emissions category**

Process (feedstock) emissions

# Value chain

Upstream

#### **Product**

Gas

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

20,003

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

0

# Total gross Scope 1 emissions (metric tons CO2e)

20.003



#### Comment

The allocation of emissions to oil and gas is performed by multiplying the emissions from each business segment with the respective fraction (%) oil and gas in the production mix.

# **Emissions category**

Process (feedstock) emissions

#### Value chain

Downstream

#### **Product**

Unable to disaggregate

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

595,340

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

0

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

595,340

Comment

# C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Norway	12,417,714
Brazil	524,976
United Kingdom of Great Britain and Northern Ireland	181,170
United States of America	1,002,603
Denmark	592,610
Bahamas	193

# C7.3

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

By business division



# C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
DPB (Development and Production Brazil)	473,703
CFO GBS (Global Business Services)	71
DPI (Devekopment and Production International)	1,160,313
DPN (Development and Production Norway)	8,128,538
MMP (Marketing, Midstream & Processing)	4,766,275
EXP (Exploration)	132,604
TPD (Technology, Projects and Drilling)	48,420
NES (New Energy Solutions)	9,341

# 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 CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Oil and gas production activities (upstream)	9,943,649	Since this is oil and gas production activity, New Energy Solutions' activities are not included.
Oil and gas production activities (midstream)	0	Equinor does not have scope 1 emissions in the transportation and distribution segment.
Oil and gas production activities (downstream)	4,766,275	Since this is oil and gas production activity, New Energy Solutions' activities are not included.

# C7.5

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

	Country/Region	based (metric tons	based (metric tons	electricity, heat, steam or cooling	electricity, heat, steam or cooling accounted for in Scope 2 market-based
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Norway	40,024	2,503,026	5,126,075	0
Denmark	51,266	283,817	301,379	0
United States of America	121,816	121,816	436,106	0
Bahamas	1,263	1,263	1,551	0
United Kingdom of Great Britain and Northern Ireland	1,106	1,845	8,504	0

# C7.6

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

By business division

# 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)
DPN (Development and Production Norway)	10,484	656,798
MMP (Marketing, Midstream & Processing)	81,186	2,076,013
CFO GBS (Global Business Services)	698	43,702
TPD (Technology, Projects and Drilling)	60	3,786
NES (New Energy Solutions)	1,230	9,652
DPI (Devekopment and Production International)	121,816	121,816



# 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 CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market- based (if applicable), metric tons CO2e	Comment
Oil and gas production activities (upstream)	133,057	826,101	Since this is oil and gas production activity, New Energy Solutions' activities are not included.
Oil and gas production activities (midstream)	0	0	Equinor does not have scope 1 emissions in the transportation and distribution segment.
Oil and gas production activities (downstream)	81,186	2,076,013	Since this is oil and gas production activity, New Energy Solutions' activities are not included.

# 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 CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	Location based approach used, no low carbon purchases. Variation in emissions as a result of changes in renewable in local grid mixes may occur but these are not controlled by the company and not accounted for here.



Other emissions reduction activities	303,290	Decreased	2	In 2019 0.3 million tonnes CO2e were reduced by our emissions reduction projects. Equinor's total Scope 1 and Scope 2 emissions in 2019 were 14 934 740 tonnes CO2e. The percentage decrease is therefore (303 300 /14 934 740 *100= 2%. The largest emissions reductions projects are modification of compressors and increased turbine efficiency on several installations.
Divestment	5,921	Decreased	0.04	In 2019 changes in emissions allocated to the category divestment decreased by 5921 tonnes CO2eq. Equinor's total Scope 1 and Scope 2 emissions in 2019 were 14 934 740 tonnes CO2eq. The percentage increase is (5921/14 934 740)*100=0,04%. This is due to the divestment of 'Statoil Deutschland Etzel Storage GmbH (Q22018).
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	238,964	Increased	1.6	In 2019 changes in output contributed to an increase of 239 000 tonnes CO2e. Equinor's total Scope 1 and Scope 2 emissions in 2019 were 14 934 740 tonnes CO2eq. The percentage increase is 1,6% (239 000/14 934 740) *100=1.6%.  The increase is due to start-up of new fields. Output in terms of production volumes decreased due to the less export from one of Equinor largest gas producing asset. This asset is electrified and the change in production has low impact on the CO2 emissions due to the low carbon emission factor.
Change in methodology	5,582	Increased	0.04	Changes in methodologies contributed to a increase of 5582 tonnes CO2e in 2019. Equinor`s total Scope 1 and Scope 2 emissions in 2019 were 14 934 740 tonnes CO2eq. The percentage increase is (5582/14 934 740) *100= 0,04%. This is due to change in emission factor.2019.



Change in boundary	0		0	
Change in physical operating conditions	267,012	Decreased	1.8	Changes in physical operating conditions led to a decrease of 267 000 tonnes CO2e in 2019. Equinor`s total Scope 1 and Scope 2 emissions in 2019 were 14 934 740 tonnes CO2e. The percentage decrease is (267 000/14 934 740) *100= 1,8%.  The main driver for the decrease is several turnarounds in 2019 and operational issues at some assets.
Unidentified	0	No change	0	
Other	125,907	Increased	1	In 2019 changes in emissions allocated to the category " other increased by 126 000 tonnes CO2eq. Equinor's total Scope 1 and Scope 2 emissions in 2019 were 14 934 740 tonnes CO2eq. The percentage increase is (126 000/14 934 740) *100= 1 %.  The "other" category includes emissions related to drilling and exploration activities. The increase is due to preparation and start-up of new fields and increased drilling activity.

# 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 0% but less than or equal to 5%



# 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	No
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	59,061,215	59,061,215
Consumption of purchased or acquired electricity		5,256,162.5	500,964.7	5,757,127
Consumption of purchased or acquired heat		0	17,409	17,409
Consumption of purchased or acquired steam		0	99,079	99,079
Consumption of self- generated non-fuel renewable energy		0		0
Total energy consumption		5,256,163	59,678,668	64,934,830



# 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)**

Butane

# **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

46,416.23

# MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

46,416.23

# MWh fuel consumed for self-generation of steam

0

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

0

# **Emission factor**

3.03

# Unit



metric tons CO2 per metric ton

#### **Emissions factor source**

Asset specific emissions factor.

#### Comment

An average emission factor provided. The emission factor may vary throughout the year.

# **Fuels (excluding feedstocks)**

Coke

#### **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

1,879,772

# MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

1,879,772

# MWh fuel consumed for self-generation of steam

0

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

Λ

# **Emission factor**

3.57

#### Unit

metric tons CO2 per metric ton

# **Emissions factor source**

An average emission factor provided. The emission factor may vary throughout the year.

#### Comment

# **Fuels (excluding feedstocks)**

Other, please specify ColGO

# **Heating value**



LHV (lower heating value)

# Total fuel MWh consumed by the organization

3,853

# MWh fuel consumed for self-generation of electricity

O

# MWh fuel consumed for self-generation of heat

3.853

# MWh fuel consumed for self-generation of steam

0

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

C

#### **Emission factor**

3.17

#### Unit

metric tons CO2 per metric ton

#### **Emissions factor source**

Asset and source specific emission factor.

#### Comment

# **Fuels (excluding feedstocks)**

Diesel

# **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

4,617,806

# MWh fuel consumed for self-generation of electricity

3,987,212

# MWh fuel consumed for self-generation of heat

630,594

# MWh fuel consumed for self-generation of steam

0

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

0



#### **Emission factor**

3.17

#### Unit

metric tons CO2 per metric ton

#### **Emissions factor source**

Most commonly used - Norwegian Climate and Pollution Agency.

#### Comment

# **Fuels (excluding feedstocks)**

**Natural Gas** 

#### **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

42.894.088

# MWh fuel consumed for self-generation of electricity

13,418,831

# MWh fuel consumed for self-generation of heat

26,765,984

# MWh fuel consumed for self-generation of steam

86.581

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

2,622,693

#### **Emission factor**

2.5

#### Unit

kg CO2 per m3

#### **Emissions factor source**

Gas composition calculations and emission factors from the Norwegian Climate and Pollution Agency. The figure is an approximate average since most emission factors are asset-specific and may vary from day to day.

#### Comment

# **Fuels (excluding feedstocks)**



#### Fuel Oil Number 1

# **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

262

# MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

262

# MWh fuel consumed for self-generation of steam

0

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

n

# **Emission factor**

3.2

#### Unit

metric tons CO2 per metric ton

#### **Emissions factor source**

Asset and source specific emission factor.

#### Comment

# **Fuels (excluding feedstocks)**

Other, please specify LOFS

# **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

4,576

# MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

4,576

# MWh fuel consumed for self-generation of steam

0



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

0

#### **Emission factor**

0.48

#### Unit

metric tons CO2 per metric ton

#### **Emissions factor source**

An average emission factor provided. The emission factor may vary throughout the year.

#### Comment

# **Fuels (excluding feedstocks)**

Other, please specify
Not assigned

#### **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

1,153,038

# MWh fuel consumed for self-generation of electricity

1,152,771

# MWh fuel consumed for self-generation of heat

267

# MWh fuel consumed for self-generation of steam

0

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

0

#### **Emission factor**

3

# Unit

metric tons CO2 per metric ton

#### **Emissions factor source**

An average emission factor provided. The emission factor may vary throughout the year.

#### Comment

MWh registered for the fuel category "Other: Not assigned" is fuel gas and diesel usage at Eagle Ford and ABO (Turbines and engines).



# Fuels (excluding feedstocks)

Other, please specify Purge gas

# **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

313,870

# MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

313,870

# MWh fuel consumed for self-generation of steam

0

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

0

#### **Emission factor**

1.29

#### Unit

metric tons CO2 per metric ton

#### **Emissions factor source**

Asset and source specific emission factor.

#### Comment

# **Fuels (excluding feedstocks)**

Refinery Gas

# **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

7,994,627

# MWh fuel consumed for self-generation of electricity

Λ

# MWh fuel consumed for self-generation of heat



3,543,073

# MWh fuel consumed for self-generation of steam

0

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

4,451,555

#### **Emission factor**

2.42

#### Unit

metric tons CO2 per metric ton

#### **Emissions factor source**

An average - Emission factors are asset and source specific and emission factor may vary throughout the year.

#### Comment

# **Fuels (excluding feedstocks)**

Other, please specify Spill gas

# **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

37,922

# MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

37,922

# MWh fuel consumed for self-generation of steam

0

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

0

#### **Emission factor**

2.85

#### Unit

metric tons CO2 per metric ton



#### **Emissions factor source**

An average - emission factor may vary throughout the year

#### Comment

# **Fuels (excluding feedstocks)**

Other, please specify Tail gas

# **Heating value**

LHV (lower heating value)

# Total fuel MWh consumed by the organization

114,922

# MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

114,922

# MWh fuel consumed for self-generation of steam

0

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

C

#### **Emission factor**

2.7

#### Unit

metric tons CO2 per metric ton

#### **Emissions factor source**

An average - emission factor may vary throughout the year

# Comment

# **Fuels (excluding feedstocks)**

Propane Gas

# **Heating value**



# Total fuel MWh consumed by the organization

62

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

62

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

**Emission factor** 

3

Unit

metric tons CO2e per metric ton

#### **Emissions factor source**

An average - Emission factors are asset and source specific.

#### Comment

# C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	9,545,800	8,894,969	0	0
Heat	13,900,927	13,863,606	0	0
Steam	43,290	43,290	0	0
Cooling	0	0	0	0

# C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.



# Sourcing method

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

Nuclear

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

Norway

#### MWh consumed accounted for at a zero emission factor

1,068,222

#### Comment

# Sourcing method

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

Nuclear

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

#### MWh consumed accounted for at a zero emission factor

46,324

# Comment

# **Sourcing method**

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

Nuclear

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

United Kingdom of Great Britain and Northern Ireland



# MWh consumed accounted for at a zero emission factor

2,621

#### Comment

# Sourcing method

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

Nuclear

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

Denmark

# MWh consumed accounted for at a zero emission factor

44,405

#### Comment

# Sourcing method

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

Hydropower

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

Norway

# MWh consumed accounted for at a zero emission factor

1,326,721

#### Comment

# Sourcing method

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

Hydropower



# Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

#### MWh consumed accounted for at a zero emission factor

25,469

#### Comment

# Sourcing method

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

Hydropower

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

Denmark

#### MWh consumed accounted for at a zero emission factor

6.838

#### Comment

# **Sourcing method**

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

**Biomass** 

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

Norway

#### MWh consumed accounted for at a zero emission factor

214,053

#### Comment

# Sourcing method



Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

**Biomass** 

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

United Kingdom of Great Britain and Northern Ireland

#### MWh consumed accounted for at a zero emission factor

3

#### Comment

# Sourcing method

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

Biomass

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

Denmark

# MWh consumed accounted for at a zero emission factor

324

#### Comment

# Sourcing method

Other, please specify

Grid mix of renewable electricity

# Low-carbon technology type

Wind

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

Norway

# MWh consumed accounted for at a zero emission factor

330,531

#### Comment



#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Wind

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

#### MWh consumed accounted for at a zero emission factor

93,890

#### Comment

#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Wind

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

United Kingdom of Great Britain and Northern Ireland

#### MWh consumed accounted for at a zero emission factor

8

#### Comment

#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Wind

### Country/region of consumption of low-carbon electricity, heat, steam or cooling

Denmark



#### MWh consumed accounted for at a zero emission factor

2,124

#### Comment

#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Hydropower

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

United Kingdom of Great Britain and Northern Ireland

#### MWh consumed accounted for at a zero emission factor

9

#### Comment

#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

**Biomass** 

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

#### MWh consumed accounted for at a zero emission factor

4,537

#### Comment

#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Solar



## Country/region of consumption of low-carbon electricity, heat, steam or cooling

Norway

#### MWh consumed accounted for at a zero emission factor

310,607

#### Comment

#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Solar

### Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

#### MWh consumed accounted for at a zero emission factor

2,078

#### Comment

#### **Sourcing method**

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Solar

### Country/region of consumption of low-carbon electricity, heat, steam or cooling

United Kingdom of Great Britain and Northern Ireland

#### MWh consumed accounted for at a zero emission factor

4

#### Comment

#### Sourcing method



Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Solar

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

Denmark

#### MWh consumed accounted for at a zero emission factor

4,875

#### Comment

#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Geothermal

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

Norway

#### MWh consumed accounted for at a zero emission factor

1.533

#### Comment

#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Other, please specify

Renewables unspecified (marked based approach)

### Country/region of consumption of low-carbon electricity, heat, steam or cooling

Norway

#### MWh consumed accounted for at a zero emission factor

49.554



#### Comment

Residual mix.

#### Sourcing method

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Other, please specify

Renewables unspecified (marked based approach)

### Country/region of consumption of low-carbon electricity, heat, steam or cooling

United Kingdom of Great Britain and Northern Ireland

#### MWh consumed accounted for at a zero emission factor

2

#### Comment

Residual mix.

#### **Sourcing method**

Other, please specify

Grid mix of renewable electricity

#### Low-carbon technology type

Other, please specify

Renewables unspecified (marked based approach)

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

Denmark

#### MWh consumed accounted for at a zero emission factor

5,725

#### Comment

Residual mix.

### C9. Additional metrics

#### C9.1

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



#### **Description**

Other, please specify
Upstream flaring intensity

#### **Metric value**

2.5

#### **Metric numerator**

tonnes of hydrocarbon flared

#### Metric denominator (intensity metric only)

1000 tonnes of hydrocarbons produced

#### % change from previous year

4.2

#### Direction of change

Increased

#### Please explain

Flaring intensity.

Our 2019 flaring intensity (upstream, operated) increased slightly from 2.4 to 2.5 tonnes/1000 tonnes of hydrocarbons produced, slightly above the 2020 target of 0.2%. This is significantly lower than the industry average of 1.1%. The increase is caused mainly by a flaring increase at Bakken due to lack of infrastructure capacity to offtake associated gas, as well as flaring at Mariner. Equinor will continue focusing on reducing flaring to achieve the ambition of zero routine flaring by 2030.

#### **Description**

Other, please specify

Low carbon and energy efficiency R&D expenditure (100% operated basis)

#### **Metric value**

20

#### **Metric numerator**

Low carbon R&D expenditure (USD)

#### Metric denominator (intensity metric only)

Total R&D expenditure (USD)

#### % change from previous year

4.8

#### Direction of change

Decreased



#### Please explain

Low carbon and energy efficiency R&D expenditure

Our low-carbon and energy efficiency R&D expenditure was around 20% in 2019, which is a small decrease from 2018. Several new low carbon technology projects were initiated late in 2019 to replace projects exiting the portfolio, but these will first show in indicator in 2020. The total low carbon R&D expenditure was around USD 59 million, of which around 67% was spent on projects related to CCS and renewables.

#### **Description**

Other, please specify
Investments in new energy solutions in share of total (%)

#### Metric value

2

#### **Metric numerator**

Investments in new energy solutions (USD)

#### **Metric denominator (intensity metric only)**

Total Equinor investments (USD)

#### % change from previous year

50

#### Direction of change

Decreased

#### Please explain

Investments in new energy solutions.

By nature, investments in large renewable projects are made with uneven intervals. 2019 was a year with lower share of investments than in 2018. This does not mean that Equinor has reduced its ambitions for growth in renewables.

Introducing our new climate roadmap, we changed our indicator from share of investments in new energy solutions, to an ambition of a great increase in installed capacity. We aim to increase our equity renewable capacity ten-fold from 2019 to 2026.

#### C-OG9.2a

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

In-year net	Comment
production	



Crude oil and condensate, million barrels	402	NGL is included in this figure.
Natural gas liquids, million barrels	0	
Oil sands, million barrels (includes bitumen and synthetic crude)	0	
Natural gas, billion cubic feet	1,998	

#### 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.

As we are listed on the NYSE, we report proved reserves (1P) as defined and required by the US Securities and Exchange Commission (SEC).

Equinor does not report 2P and 3P reserves, since these numbers are regarded to be internal and confidential information. These numbers are therefore not disclosed in the Annual report and 20F.

#### 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			19,000	As we are listed on the NYSE, we report proved reserves (1P) as defined and required by the US Securities and Exchange Commission (SEC).  Equinor does not report 2P and 3P reserves, since these numbers are regarded to be internal and confidential information. These numbers are therefore not disclosed in the Annual report and 20F.



### 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			50	As we are listed on the NYSE, we report proved reserves (1P) as defined and required by the US Securities and Exchange Commission (SEC).  Equinor does not report 2P and 3P reserves, since these numbers are regarded to be internal and confidential information. These numbers are therefore not disclosed in the Annual report and 20F.
Natural gas			50	As we are listed on the NYSE, we report proved reserves (1P) as defined and required by the US Securities and Exchange Commission (SEC).  Equinor does not report 2P and 3P reserves, since these numbers are regarded to be internal and confidential information. These numbers are therefore not disclosed in the Annual report and 20F.
Oil sands (includes bitumen and synthetic crude)			0	As we are listed on the NYSE, we report proved reserves (1P) as defined and required by the US Securities and Exchange Commission (SEC).  Equinor does not report 2P and 3P reserves, since these numbers are regarded to be internal and confidential information. These numbers are therefore not disclosed in the Annual report and 20F.



#### 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**

Arctic

In-year net production (%)

8

Net proved reserves (1P) (%)

21

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

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

Net total resource base (%)

#### Comment

CDP defines Arctic as above 62 deg. The number provided includes assets in the Norwegian Sea. The Norwegian Sea does not have Arctic conditions (light, icing, icebergs, tundra etc).

#### **Development type**

Tight/shale

In-year net production (%)

15

Net proved reserves (1P) (%)

10

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

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

Net total resource base (%)

#### Comment



This figure includes US shale assets.

#### **Development type**

Onshore

In-year net production (%)

4

Net proved reserves (1P) (%)

13

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

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

Net total resource base (%)

#### Comment

Includes shale production.

#### **Development type**

Ultra-deepwater

In-year net production (%)

6

Net proved reserves (1P) (%)

4

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

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

Net total resource base (%)

#### Comment

Ultra-deep water > 1500 meter water depth.

#### **Development type**

Shallow-water



```
In-year net production (%)
    25
Net proved reserves (1P) (%)
Net proved + probable reserves (2P) (%)
Net proved + probable + possible reserves (3P) (%)
Net total resource base (%)
Comment
    Shallow-water < 150 meter.
Development type
    Oil sand/extra heavy oil
In-year net production (%)
   0
Net proved reserves (1P) (%)
Net proved + probable reserves (2P) (%)
Net proved + probable + possible reserves (3P) (%)
Net total resource base (%)
Comment
    Equinor's oil sand assets were divested in 2016.
Development type
   LNG
In-year net production (%)
Net proved reserves (1P) (%)
Net proved + probable reserves (2P) (%)
```



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

Net total resource base (%)

#### Comment

This figure is related to Equinor's Snøhvit field.

#### **Development type**

Deepwater

In-year net production (%)

51

Net proved reserves (1P) (%)

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

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

Net total resource base (%)

#### Comment

Deepwater includes operation on water depths between 150 and 1500 meters.

#### 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	412

#### C-OG9.3b

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

	Throughput (Million barrels)	Comment
Oil	94.6	
Other feedstocks	37.1	



Total	131.7	

#### C-OG9.3c

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

#### 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
Other, please specify	925.25	1,300
Methanol		

# 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	

#### 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
Carbon capture and storage/utilisation	Pilot demonstration	≤20%		Our low-carbon and energy efficiency R&D expenditure was around 20% in 2019, which is a small decrease from 2018. Several new low carbon technology projects were initiated late in 2019 to replace projects exiting the portfolio, but these will first show in indicator in 2020. The total low



			carbon R&D expenditure was around USD 59 million.
Other energy efficiency measures in the oil and gas value chain	Large scale commercial deployment	≤20%	Our low-carbon and energy efficiency R&D expenditure was around 20% in 2019, which is a small decrease from 2018. Several new low carbon technology projects were initiated late in 2019 to replace projects exiting the portfolio, but these will first show in indicator in 2020. The total low carbon R&D expenditure was around USD 59 million.
Methane detection and reduction	Applied research and development	≤20%	Methane is the second most important greenhouse gas contributing to human induced climate change. We have estimated Equinor's methane intensity for the upstream and midstream parts of the value chain that we control to be as low as approximately 0.03%. Equinor aims to continue to pursue an intensity ambition of "near zero". We will continue to develop and implement technologies and procedures to detect and reduce methane emissions, support industry efforts to reduce methane emissions across the oil and gas value chain, increase the quality and transparency of reported data, and support the development of sound methane policies and regulations.
Renewable energy	Large scale commercial deployment	≤20%	Our low-carbon and energy efficiency R&D expenditure was around 20% in 2019, which is a small decrease from 2018. Several new low carbon technology projects were



		initiated late in 2019 to replace
		projects exiting the portfolio,
		but these will first show in
		indicator in 2020. The total low
		carbon R&D expenditure was
		around USD 59 million.

#### 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.

50

#### C-OG9.8

(C-OG9.8) Is your organization involved in the sequestration of CO2?
Yes

#### C-OG9.8a

(C-OG9.8a) Provide, in metric tons CO2, gross masses of CO2 transferred in and out of the reporting organization (as defined by the consolidation basis).

	CO2 transferred – reporting year (metric tons CO2)	
CO2 transferred in	13,106	
CO2 transferred out	0	

#### C-OG9.8b

(C-OG9.8b) Provide gross masses of CO2 injected and stored for the purposes of CCS during the reporting year according to the injection and storage pathway.

Injection and storage pathway	Injected CO2 (metric tons CO2)	Percentage of injected CO2 intended for long-term (>100 year) storage	Year in which injection began	Cumulative CO2 injected and stored (metric tons CO2)
CO2 injected into a geological formation or saline formation for long-term storage	1,431,753		January 1, 1996	25,076,228

#### C-OG9.8c

(C-OG9.8c) Provide clarification on any other relevant information pertaining to your activities related to transfer and sequestration of CO2.

Carbon capture, utilisation and storage (CCUS) and hydrogen



Equinor has over 20 years' experience in CCUS, currently the main technology for decarbonising fossil fuels. We capture and store CO2 at our Sleipner and Snøhvit fields on the Norwegian continental shelf. To date we are storing around 25 million tonnes.

As a leader in CCUS, Equinor is working to build a European value chain, capturing and storing CO2 from industrial plants that have CO2 as a by-product, for example waste management facilities and cement producers. The Norwegian government is a key partner and has also set the ambition to develop a full-scale CCUS value chain in Norway by 2024. We are currently involved in the Northern Lights project, together with Shell and Total, which includes the transport and permanent storage of CO2 in a safe reservoir in the North Sea. Northern Lights is part of the Norwegian Government's "Full-scale value chain in Norway" demonstration project. In 2019, Equinor has on behalf of the partners signed memoranda of understanding (MoUs) with seven European companies to develop value

chains in carbon capture and storage. At the end of 2019, the partnership drilled a confirmation well to study the reservoir's suitability and capacity for CO2 storage. The partners are currently reducing costs and further developing the Northern Lights project, aiming for an investment decision in 2020.

### 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



U Equinor Sustainability report 2019.pdf

#### Page/ section reference

The independent assurance report from EY may be found on page 61 in our Sustainability report.

#### Relevant standard

ISAE3000

#### 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

U Equinor Sustainability report 2019.pdf

#### Page/ section reference

The independent assurance report from EY may be found on page 61 in our Sustainability report.

#### Relevant standard

ISAE3000

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

100

#### Scope 2 approach

Scope 2 market-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

U Equinor Sustainability report 2019.pdf

#### Page/ section reference

The independent assurance report from EY may be found on page 61 in our Sustainability report.

#### Relevant standard

ISAE3000

#### 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: 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

Equinor Sustainability report 2019.pdf

#### Page/section reference

The independent assurance report from EY may be found on page 61 in our Sustainability report.

#### Relevant standard



ISAE3000

### 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?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Emissions reduction activities	ISAE 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information".	From auditor EY's independent assurance report (page 61): "Our task is to issue an independent report to the CEO on the Reporting on Sustainability based on our work. Our work is conducted in accordance with ISAE 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". This engagement consists of two parts a limited assurance engagement and a reasonable assurance of selected disclosures. A limited assurance engagement is different from and substantially less in scope than reasonable assurance engagement conducted in accordance with IAASB's Standards on Auditing and other generally accepted auditing standards."
C4. Targets and performance	Energy consumption	ISAE 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information".	From auditor EY's independent assurance report (page 61): "For the reasonable assurance engagement it is our opinion that the disclosures on safety: Total recordable injury frequency (TRIF), Serious incident frequency (SIF), Fatalities, Oil spills, Serious oil and gas leakages; and disclosures on climate and environment: emissions of Carbon dioxide, Methane, NOx and SOx; and energy consumption have, in all material respects, been prepared in accordance



			with the criteria defined by the CEO and Executive Management."
C4. Targets and performance	Year on year change in emissions (Scope 1)	ISAE 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information".	From auditor EY's independent assurance report (page 61): "Our task is to issue an independent report to the CEO on the Reporting on Sustainability based on our work. Our work is conducted in accordance with ISAE 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". This engagement consists of two parts a limited assurance engagement and a reasonable assurance of selected disclosures. A limited assurance engagement is different from and substantially less in scope than reasonable assurance engagement conducted in accordance with IAASB's Standards on Auditing and other generally accepted auditing standards."
C1. Governance	Other, please specify	ISAE 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information".	The entire Equinor Sustainability report has been subject to third party verification.  This is stated in EY's independent assurance report (page 61): "We have performed an independent verification of Equinor ASA's reporting on Sustainability for 2019 (the Report) as Equinor has defined in its 2019 GRI standards index and on page 5 of the Sustainability Report. Our review includes data from Equinor ASA's 2019 Sustainability Report and figures presented in the Sustainability Datahub as shown in the GRI Index. We have assessed if the information being presented in the Report is based on relevant criteria from the GRI (Global Reporting Initiative) sustainability reporting standards, GRI Standards option "core". Controlled information is shown in the company's GRI index, see https://www.equinor.com/en/how-andwhy/sustainability/sustainability-reports.html."

U <sup>1</sup>Equinor Sustainability report 2019.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** 

Norway carbon tax

#### 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

79.5

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2019

Period end date

December 31, 2019

Allowances allocated

6,147,927

Allowances purchased

5,553,824

Verified Scope 1 emissions in metric tons CO2e

11,701,751

Verified Scope 2 emissions in metric tons CO2e

#### **Details of ownership**

Facilities we own and operate

#### Comment



The amount of allowances purchased is calculated as a difference between the allowances allocated and verified emissions.

#### C11.1c

## (C11.1c) Complete the following table for each of the tax systems you are regulated by.

#### Norway carbon tax

#### Period start date

January 1, 2019

#### Period end date

December 31, 2019

#### % of total Scope 1 emissions covered by tax

68

#### Total cost of tax paid

463,977,117

#### Comment

Share covered by tax: % of total scope 1 emission covered by the Norwegian tax regime from upstream and downstream segment, divided by total scope 1 emission. Numbers are 100% operated for Norwegian continental shelf (NCS) and equity share for onshore plant.

#### C11.1d

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

Our first objective is to ensure that we are in compliance with the schemes in which we participate, and in addition that transaction cost is minimized. Equinor operates facilities which are subject to Norwegian and European carbon pricing. The company must each year submit quotas for the greenhouse gas emissions from our oil and gas production on the Norwegian and UK continental shelf and onshore facilities in Norway and Denmark. Emission allowances are purchased in the market to meet these compliance obligations. The emission trading group is responsible for compliance related CO2 trading for Equinor operated emissions. Equinor has been buying European Carbon Allowances (EUAs) in the carbon market since the start of the carbon exchange in 2005 and has been buying Certified Emission Reduction (CERs) since 2007 for compliance purposes.

From medio 2019, the wholly owned subsidiary of Equinor, Danske Commodities, has been responsible for CO2 Compliance. Equinor supports the developments of new emission trading schemes in different parts of the world. We recognize it as the most cost-efficient way to cut greenhouse gas emissions.



There are many exchanges in Europe that facilitate transaction of the commodity EU Allowance. Equinor use the InterContinentalExchange for EUAs and other commodities. When long and short positions in different commodities can be netted, we save on margins. Thus, this is the most efficient way for Equinor and the licenses to transact EUAs.

Allowances purchased are subject to third party verification.

#### 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**

Transport

#### **Project identification**

Voluntary to provide CO2 neutral travel for employees. Transaction ID EU541385.

#### Verified to which standard

CDM (Clean Development Mechanism)

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

65,000

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

65,000

#### **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

Navigate GHG regulations

Stakeholder expectations

Change internal behavior

Drive energy efficiency

Drive low-carbon investment

Stress test investments

#### **GHG Scope**

Scope 1

Scope 2

Scope 3

#### **Application**

Equinor uses internal price on carbon for:

- 1) Investments (scope 1, 2). In our decision making, we require all producing assets and non-sanctioned projects in all countries to include a carbon price in their investment case. We apply an internal carbon price of at least USD 55 per tonne of  $CO_2$  in investment analysis to keep our portfolio robust. In countries where the actual or predicted carbon price is higher, we apply the actual or expected cost, such as in Norway where both a  $CO_2$  tax and the EU ETS apply.
- 2) Carbon neutral business flights (scope 3). Market price for CDM credits (CERs) applied.
- 3) Carbon neutral operations (scope1, 2). Equinor will by 2030 offset all operated emissions that are not subject to a price on carbon. Price will depend on market price for carbon sink credits.

#### Actual price(s) used (Currency /metric ton)

55,100

#### Variance of price(s) used

In addition to the internal carbon price of at least USD 55 per tonne of  $CO_2$  for investments, Equinor annually conducts a price sensitivity analysis with a carbon price of USD 100/tonne to test the robustness of our assets. The outcome of the sensitivity analysis is described in Equinor's 2019 Sustainability report (p 16-19). All Equinor operated projects are also required to be assessed for carbon intensity and emission reduction opportunities at every phase – from exploration and business development to project development and operations.

Internal carbon pricing, scenario analysis and sensitivity analysis enable us to assess climate-related risks. These types of risks are embedded in our enterprise risk management process. Climate-related risks and opportunities, and Equinor's strategic



response to these, are discussed frequently by our corporate executive committee and board of directors. Climate-related risks are also discussed in relation to specific investment decisions and portfolio considerations. Climate-related risks and opportunities are reported in line with the "Task Force on Climate related Financial Disclosures" (TCFD) recommendations.

At Equinor climate and sustainability is embedded in our performance and reward framework. The performance of the CEO and his direct reports is among other assessed and rewarded against both ambitious climate targets (KPIs) and results, as is their ability as leaders to role model sustainable development and the transition into new energy sources. Equinor's broader leadership is in the same way assessed and rewarded based on a number of goals including climate and sustainability. Finally, the annual bonus for employees is based on an assessment of company performance which includes CO<sub>2</sub> intensity and execution of climate strategies.

#### Type of internal carbon price

Shadow price

#### Impact & implication

CARBON TAXES AND QUOTAS

Our oil&gas operations in Europe are part of the EU Emission Trading Scheme (EU ETS). Equinor buys EU ETS allowances (quotas) for the emissions related to our oil&gas production and processing. Currently we receive a share of free allowances (quotas) according to the EU ETS regulation. The share of free quotas will be significantly reduced in the future. In 2019, the average cost of EU ETS allowances (quotas) was  $28 \text{ USD/t CO}_2$ .

In addition, our oil and gas production and processing in Norway are subject to Norwegian CO<sub>2</sub> tax. In 2019, the offshore Norwegian CO<sub>2</sub> tax was 53 USD/t CO<sub>2</sub>.

### 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 Climate change is integrated into supplier evaluation processes

#### % of suppliers by number

50

#### % total procurement spend (direct and indirect)

75

#### % of supplier-related Scope 3 emissions as reported in C6.5

0

#### Rationale for the coverage of your engagement

At Equinor, we recognise the great contributions that our suppliers make to the success of our company and the value they create for our partners and customers. We are committed to using suppliers who operate consistently in accordance with our values, and who maintain high standards of safety, security, and sustainability.

Equinor has "low carbon" as one of the main strategic pillars on which the governance of the company is based and we embed climate considerations into business decision-making processes, including the procurement process. "Low carbon" guides us in all phases of our supply chain management process, from specific sourcing strategy, qualification, pre-qualification, award (procurement personnel), contract management, and contract close-out, to category management and management of key suppliers through contract.

We have ongoing initiative for suppliers to provide information of environmental labelling or carbon footprint related to their products and services. Climate-related criteria have been included in the supplier selection process and management mechanism. Suppliers are required to have in place environmental and energy management systems that are in accordance with ISO 14001 (or similar) and ISO 50001 (or similar). We have also integrated climate-related risks and opportunities in the supplier evaluation process.

These compliance and onboarding measures help us maintain a strong relationship with a group high-quality supplier who meet Equinor's standards on environment and sustainability. It will also enable us to maintain a low-carbon advantage over time.

#### Impact of engagement, including measures of success

We primarily use the service of EPIM JQS to register suppliers' emission data and to evaluate if suppliers meet Equinor's standards on climate-related issues in addition to requirements in ITT and contracts. We regularly audit key suppliers. Climate-related performance is one of key issues being reviewed by Equinor's personnel. The results will be the basis for qualification. Equinor qualified suppliers will be marked with a green flag in two of the major supplier databases: the EPIM JQS and ISNetworld. Such qualification is valid for 36 months.

The success of this engagement is measured based on if Equinor can develop a



solution to efficiently select suppliers who meet our standards on environmental labelling and carbon footprint in the qualification process. We aim to build a group of key suppliers who can obtain "green flag" in the EPIM JQS database. The numbers of Equinor qualified suppliers have been increasing over the last a few years due to use of the EPIM JQS.

During 2019, there were conducted 250 supplier audits through the EPIM JQS in addition to some audits performed by Equinor's internal auditors and through other systems as ISNetworld\*. While the majority of the suppliers being audited did meet our requirements, there were suggested areas of improvement. We also follow up with the companies which do not meet Equinor's requirements. They can however still be granted a "green flag" when they manage to close the findings discovered during audits.

#### Comment

More information is available at our web site www.equinor.com Supplier requirements (Code of Conduct, Supplier declaration etc.): https://www.equinor.com/en/supply-chain.html

#### Type of engagement

Innovation & collaboration (changing markets)

#### **Details of engagement**

Run a campaign to encourage innovation to reduce climate impacts on products and services

#### % of suppliers by number

25

#### % total procurement spend (direct and indirect)

25

#### % of supplier-related Scope 3 emissions as reported in C6.5

25

#### Rationale for the coverage of your engagement

Our suppliers already make a significant contribution to reducing the scope 1 emissions from our operations, providing carbon efficient services and equipment. In 2019, we initiated the "responsible customer" program, aiming to work with suppliers to find innovative and commercially viable ways to reduce scope 3 emissions across the supply chain.

Equinor has about 9000 suppliers split into different categories. We have screened all the categories to identify the most carbon intensive and hard-to-abate ones, such as heavy-duty transport (maritime, road, rail, air), cement and steel. We, therefore, focus on emission reduction measures in these categories to aim for the largest impact. We pay special attention to emission in the maritime sector as it accounts for approximately 65% of Equinor's scope 3 emission from the supply chain.



The maritime sector falls within the carbon intensive hard-to-abate transport sector and represents about 3% of the global emission and 6% of the total emissions in Norway. In response to increasing expectations to decarbonise the maritime sector, the International Maritime Organisation (IMO) and the Norwegian government are proposing ambitions to reduce the absolute emissions:

- IMO: 50% absolute reduction by 2050 compared to 2008 and activity-based ambitions of 40% reduction by 2030 and 70% by 2050 for global maritime emissions
- Norway: 50% absolute reduction by 2030 compared to 2005 for maritime activity in Norway

As a buyer, producer and seller of marine, Equinor is committed to utilise its unique position to contribute decarbonisation of the maritime sector.

On the buyer side Equinor will set an ambition in line with Norway & IMO for the maritime services we purchase and strategically drive transition to zero carbon fuels:

- By 2030: 50% reduction of Equinor's maritime emissions in Norway vs 2005
- By 2050: 50% reduction of Equinor's maritime emissions globally vs 2008 (IMO baseline)

On the provider side Equinor supports the development of new low carbon technologies for shipping and aims to build a market for future fuels. Further, increase the production of lower and zero carbon fuels hand in hand with development of CCS as available technology. Our ambitions are:

- Towards 2030: Escalate production and use of lower carbon fuels
- Towards 2050: Strongly increase production and use of zero carbon fuels

#### Impact of engagement, including measures of success

We measure our engagement with suppliers according to our strategy – always safe, high value, and low carbon. From a climate perspective, the impact of our engagement with suppliers is measured according to whether suppliers help us to deliver the emission reduction targets and ambitions we set for ourselves. In 2019, Equinor delivered 303,000 tonnes of CO2 emission reductions, exceeding our target of 275,000 tonnes. This is mainly due to more energy efficiency projects implemented in various business units.

In the maritime sector, we work with suppliers to find technical, operational, and fuel-related measures to achieve emission reductions. We focus on fuel efficiency when entering new vessel contracts; incentive schemes further encourage suppliers to ensure fuel-efficient operations. Other examples are battery-hybridisation and LNG powered supply vessels, shore-power supply for vessels, optimising sailing routes and planning for green speed. By the end of 2019, nearly all platform supply vessels (PSV) on long-term contract have been the required installation of onshore power supply and installed batteries for hybrid operation, for reducing the fuel consumptions and emissions (Co2, NOx, etc.)



In addition, Equinor work with suppliers and partners in the ShipFC project in 2019 – a maritime innovation project looking to install the world's first ammonia-powered fuel cell on a vessel. The project is an EU Call launched in 2019 with a total budget on € 21.5 million and Equinor will contribute a significant part. Together with 13 partners, Equinor will explore ways to install Fuel Cell on Viking Energy by 2024. The Fuel Cell will be driven on Green Ammonia (ammonia produced for renewable sources). This project could be a game-changer in zero-emission vessels.

#### Comment

More information is available at our web site www.equinor.com

Equinor launching maritime climate ambitions: https://www.equinor.com/en/news/202006-08-maritime-climate-ambitions.html

#### C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

#### Type of engagement

Collaboration & innovation

#### **Details of engagement**

Run a campaign to encourage innovation to reduce climate change impacts

#### % of customers by number

25

### % of customer - related Scope 3 emissions as reported in C6.5

25

## Please explain the rationale for selecting this group of customers and scope of engagement

Over 85% of the total emissions from oil and gas comes from their use rather than their production. To achieve the ambitions of the Paris Agreement, society must address emissions from initial production to final consumption. That's why Equinor is committed to engaging with users of our products to develop low carbon solutions to accelerate decarbonisation for society and the industry.

We are focusing on Carbon Capture Utilisation and Storage (CCUS) and hydrogen solutions as these technologies can remove CO2 from high-carbon industrial sectors that cannot be easily decarbonised, such as industry, maritime transport, heating and power generation. Maturing and expanding CCUS and hydrogen can only be realised in close collaboration with governments and customers, to establish a commercial framework and build new markets. We also need strategic partnerships with industrial players to ensure safe, reliable and cost-effective implementation.



As a leader in CCUS, Equinor is working to build a European value chain, capturing and storing CO2 from industrial plants that have CO2 as a by-product, for example waste management facilities and cement products. The Norwegian government is a key partner and has also set the ambition to development a full-scale CCUS value chain in Norway by 2024.

Meanwhile, Equinor is prepared for future growth in hydrogen, which offers large-scale opportunities for zero emissions energy while leveraging existing infrastructure. By removing CO2 from natural gas, Equinor can produce emission-free hydrogen that can be used in industrial settings, such as power generation and marine fuels as well as residential ones, such as heating.

#### Impact of engagement, including measures of success

For Equinor, it is challenging to measure the impact of our engagement with customers. While our direct customers are traders and utility companies who purchase oil and gas directly from us, all users of gas and oil resources, companies or individuals, can be categorised as our indirect customers. Therefore, some of our engagement addresses industry sectors, governments and customers beyond our direct customers. As such we have roughly assessed the engagement figure to be 25%, but this is not an exact figure. A rough estimate is that we are engaging with 25% of the customers, and the share of scope 3 emissions addressed in our activities towards customers as described above would be in the order of magnitude of 25%. The success of our engagement policy is measured according to the involvement in low-carbon solution projects, such of CCUS and hydrogen.

#### **CCUS**

We are currently involved in the Northern Lights project, together with Shell and Total, which includes the transport and permanent storage of  $CO_2$  in a safe reservoir in the North Sea. Northern Lights is part of the Norwegian demonstration project. In 2019, Equinor, Shell and Total have decided to invest in the Northern Lights project in Norway's first exploitation license for  $CO_2$  storage on the Norwegian Continental Shelf. At the end of 2019, the partnership drilled a confirmation well to study the reservoir's suitability and capacity for  $CO_2$  storage. Plans for development and operation have been handed over to the Ministry of Petroleum and Energy.

#### Hydrogen

Equinor is currently involved in several hydrogen pilots and projects, such as

- HyDemo Norway demonstration of natural gas-based hydrogen production with CO2 from industrial sources
- Zero Carbon Humber aim to build the world's first zero carbon industrial cluster in the North of UK
- Clean steel replacing coal with hydrogen to decarbonise the steel industry
- H2 Ammonia in shipping replacing diesel/fuel oil in the shipping sector with clean hydrogen



#### C12.1d

### (C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

In addition to engaging with suppliers and customers, we are also committed to working with other partners, such as peers in the oil & gas sector, industry players and governments to find innovative and commercially viable ways to reduce emissions across the oil and gas value chain.

We engage with governments and like-minded organisations to support carbon pricing and complementary climate and energy policies. We also engage with these partners through membership of industry organisations and participation in industry initiatives. Our actions are guided by the United Nation's Sustainable Development Goals, especially by Goal 7 on affordable and clean energy, Goal 13 on Climate action, and Goal 17 on partnerships.

In the Oil and Gas Climate Initiative (OGCI), we have teamed up with 12 peer companies to shape the industry's climate response. To spur technology development, we are a partner in the USD 1 billion-plus investment fund OGCI Climate Investments.

We continue to report on climate-related risks and opportunities in line with the recommendations of the "Task Force on Climate-related financial Disclosures" (TCFD). To enhance our work on reducing methane emissions, we have joined the One Future Coalition, the Climate and Clean Air Coalition Oil and Gas Methane Partnership, and the Guiding Principles on Reducing Methane Emissions Across the Natural Gas Value Chain.

We also welcome constructive engagement with investors participating in Climate Action 100+. As part of this dialogue, Equinor announced new commitments in 2019 to set out climate-related ambitions beyond 2030; assess out portfolio and new material capital expenditure investments towards a well below 2-degree scenario; enhance the link between climate ambitions and remuneration for senior executives and employees, and review memberships in relevant industry associations with regards to indirect policy engagement.

Climate change calls for new solutions and partnerships. We recognise that it is important that our memberships in relevant industry associations do not undermine our support of the Paris Agreement. In 2019, Equinor started a comprehensive review of its memberships in industry associations that have a position on climate and energy policy. Equinor holds membership and is engaged in more than 100 energy and climate associations and initiatives globally, such as IPIECA, World Resources Institute, WBCSD, IETA, EITI, TCFD, Nordic CEOs for a sustainable future, CPLC and more. Approximately 25% are non-advocacy. We have inquired about the associations with an active policy agenda to determine whether their respective climate stance is in alignment with Equinor's. After a screening of more than 80 associations within scope. some of the associations have been subject to a deeper assessment where they were contacted in written and feedback was received.



### 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

### 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	Equinor is contributing to position papers on EU ETS from industry associations, like IOGP, FuelsEurope and Business Europe. Equinor also engages directly with policy makers in our key markets.	Equinor supports the strengthening of EU ETS, including support to Market Stability Reserve and ambitious 2030 GHG target for the EU.
Cap and trade	Support	Equinor is member of the steering committee of the International Emission Trading Association's (IETA's) B-PMR, to support building on carbon markets initiatives around the world. Equinor is also a founding Member of The World Bank's Carbon Pricing Leadership Coalition and a member of their high-level Commission on carbon pricing. In addition to engaging through industry associations, we are directly engaging with stakeholders and communicate our position by speaking at conferences, attending panel debates and participating in the public debate.	Equinor actively advocates for a price on carbon globally and supports initiatives on carbon pricing and linking of carbon market schemes.
Other, please specify EU 2030 climate target	Support	Norway has agreed with EU on a joint 2030 climate target of 40 % reduction from 1990 to 2030.  Equinor is a member of the Norwegian government's climate council.	Equinor supports the ambitious GHG reduction target outlined in the EU New Green Deal and in Norway's enhanced NDC (Nationally Determined Contribution) to the Paris agreement.



		Equinor is engaging directly with EU and Norwegian stakeholders on climate related issues.  Equinor has engaged with Norwegian government authorities on climate target and measures for the non-ETS sector (Klimakur 2030).	Equinor is also supporting a higher ambition for the non-ETS sector in Norway by 2030, which includes transport, methane and CCS.  Equinor launched January 2020 an ambition to reduce the emissions from our oil and gas production and processing in Norway by 40 % in 2030, by 70 % in 2040 and near zero in 2050.
Regulation of methane emissions	Support	Equinor has for many years undertaken a number of activities to respond to regulatory methane developments in US and Norway and has progressed on the objectives for methane improvement activities.  In response to the (former) Obama Administration's increased focus on methane emissions in the US, Equinor has been actively engaged by: (1) evaluating operational aspects and implementing reduction measures for our US onshore assets, and (2) engaging with industry and the Administration regarding the development of a voluntary program.	Equinor's corporate methane ambition is to maintain the very low methane intensity from Equinor's oil and gas operations (2019 performance: 0.03%) and continue to explore emission reduction opportunities. This entails:  1) develop and implement technologies and procedures to detect and reduce methane emissions  2) support industry efforts to reduce methane emissions across the oil and gas value chain  3) increase the quality and transparency of reported data  4) support the development of sound methane policies and regulations.
		In Norway, Equinor and other industry peers, have been collaborating with the Norwegian Environment Agency (NEA) to improve the identification and quantification of methane and nonmethane volatile organic compound (NMVOC) emissions, and evaluate the possibilities for further emission reductions for existing and future operations. A key deliverable from this work was	Equinor opposes the US Environmental Protection Agency's proposal to roll back methane emission performance standards established in 2016. Equinor supports the direct regulation of methane in the US at the federal level. We think that a federal regulatory "floor" can provide industry a consistent, flexible, predictable, and comprehensive policy framework to drive collective improvement.



an update of the quantification methodologies for the regulatory reporting on methane and NMVOC emissions at the Norwegian Continental Shelf. 2016 was the first year in which Equinor utilized these updated quantification methodologies for the reporting of upstream methane and NMVOC emissions from our upstream activities in Norway. In 2018 and 2019 we continued a similar collaboration with NEA to address. methane and NMVOC emissions at chain. the onshore oil and gas facilities in Norway.

In 2017 Equinor carried out an internal study that indicates that the methane leakage rate for the natural gas value chain from offshore production in Norway to the customers in Germany and the UK is below 0.3%, which is well below the threshold for which the environmental benefit of natural gas vs coal is questioned.

#### Submissions:

- 1) Equinor submitted in 2019 our views on US methane regulations and policy measures directly to the US Environmental Protection Agency (EPA).
- 2) Equinor submitted in 2020 our views on methane regulations and policy measures directly to the Norwegian authorities as a response to the public consultation of Klimakur 2030.
- 3) Equinor submitted in 2020 our views on methane regulations and policy measures directly to EU Commission.
- 4) Equinor, together with nine other companies and organisations,

Equinor supports further development of methane regulations in Norway, and in particular the work to reduce the uncertainty for the methane data.

Equinor supports an ambitious EU methane strategy, including an upstream performance standard of 0.20 % by 2025 with a potential extension of a procurement standard for the entire gas value chain.



		submitted a joint recommendation to the EU Commission on methane policy measures for EU.	
Regulation of methane emissions	Support	Equinor was one of the eight founding companies of Methane Guiding Principles (MGP) in 2017.  Today the MGP consists of 22 signatories across the entire gas value chain and 16 supporting organisations, including the Environmental Defense Fund, the International Energy Agency and UN Environment.  Equinor is a part of the Methane Guiding Principles Roundtable and contribute to the various working groups, including the EU Policy work group.	All MGP signatories are committed to the 5 principles:  1. Continually reduce methane emissions  2. Advance strong performance across the gas supply chain  3. Improve accuracy of methane emissions data  4. Advocate sound policy and regulations on methane emissions  5. Increase transparency  Significant progress has been made within all 5 principles, including best practices for reducing methane, education program and methane information portal.
Regulation of methane emissions	Support	In the US, Equinor has joined the Environmental Partnership, comprised of companies in the US natural gas and oil industry, committed to continuously improving the industry's environmental performance.	As a part of our participation in Environmental Partnership we have committed to implement three specific performance programs focused on minimizing emissions of methane and volatile organic compounds (VOCs) in onshore US operations.
Regulation of methane emissions	Support	In 2017, Equinor joined the One Future coalition in the US. One Future's members include some of the largest natural gas production, processing, transmission and distribution companies in the US representing nearly the entire natural gas value chain.	One Future member companies are committed to continuously improving their emissions management to assure efficient energy production and delivery.  Equinor sees our membership as a way to facilitate greater policy and technology outreach with industrial partners and regulatory agencies.
Regulation of methane emissions	Support	Equinor is a founding partner of the Climate and Clean Air Coalition Oil and Gas Methane Partnership (CCAC OGMP), that was established in 2014.  Equinor has played a key role in	Through the OGMP partnership, Equinor is committed to systematically addressing methane emissions and reporting on annual progress. In January 2020, OGMP members agreed to an updated framework designed to ensure that



	developing the improved reporting framework (OGMP 2.0).	it fosters and encourages reporting that remains directly connected to strategic action. This improved methane reporting has a performance element that focuses on reduction approaches, technology advancement and policy development, aiding the oil and gas industry in realizing deep reductions in mineral methane emissions over the next decade in a way that is transparent to civil society and governments.
		The OGMP Reporting Framework 2.0 will provide the public the assurance that this important greenhouse gas is being managed responsibly. Companies which conform to this gold standard of reporting will be provided with the means to credibly demonstrate that they are contributing to climate mitigation and delivering against their methane improvement objectives and targets, as relevant.  OGMP members are currently in
		the process of finalizing approval and endorsement of the new framework before it is officially implemented.
Other, please specify OGCI and OGCI CI	Equinor was one of the founding partners for the Oil and Gas Climate Initiative (OGCI) and OGCI Climate Investments in 2015.  Equinor sits in the CEO Steering Committee and the Executive Committee and contributes to all the work streams.	OGCI is a CEO-led initiative that aims to lead the industry response to climate change. It is currently made up of 13 oil and gas companies that collaborate to reduce greenhouse gas emissions in the sector. Members share all costs equally and fund the OGCI Climate Investment (OGCI CI) vehicle - a \$100m commitment over 10 years. CI invests in innovative start-ups to lower the carbon footprints of the energy and industrial sectors and their value



			chains and use the OGCI network to help them achieve commercial success.  Equinor is committed to supporting the OGCI in reaching its collective methane emission target of 0.25 % in 2025, with an ambition of 0.20 %, and to work across the value chain to achieve 'near zero' methane emissions.  Through our membership in the
			OGCI, we have provided financial and technical backing for two major global studies of methane emissions from the natural gas value chain. The "Oil and Gas Methane Science Studies" together with the Climate and Clean Air Coalition (CCAC), Environmental Defense Fund (EDF) and European Commission and a lifecycle study with Imperial College London.
Other, please specify Carbon Capture, Utilisation and Storage (CCUS)	Support	Equinor is in close dialogue with the governments and authorities in the UK and Norway regarding development of Carbon Capture, Utilisation and Storage (CCUS).  Here are examples of projects were Equinor is partner:  1) Equinor is responsible for	TCM proved to be a valuable facility to test capture technologies under strict emission conditions. TCM is the world's largest testing institution, cooperating closely with vendors, researchers and other institutions such as National Energy Technology Laboratory (NETL) in the USA.
		operating the Technology center Mongstad (TCM). In 2017, Equinor signed a three-year contract with the Norwegian government, Shell and Total, to extend carbon capture testing at the TCM.  2) Drax Group, Equinor and National Grid Ventures work together to explore how a large- scale CCUS network and a hydrogen production facility could	May 2019 Drax Group, Equinor and National Grid Ventures have signed a Memorandum of Understanding (MOU) committing them to work together to:  1) Explore the opportunity to scale-up the innovative bioenergy carbon capture and storage (BECCS) pilot project at the Drax Power Station in order to create the world's first carbon negative power station in the 2020s.



			DISCLOSURE INSIGHT ACTION
		be constructed in the Humber region in the UK in the mid-2020s.  3) Equinor is a partner in the Net Zero Teesside is a Carbon Capture, Utilisation and Storage (CCUS) project.  4) Equinor is a partner of the Northern Lights CCS project. This full-scale project is a result of The Norwegian government's ambition to develop a full-scale CCS value chain in Norway by 2024. As part of this ambition the government issued feasibility studies on capture, transport and storage solutions in 2016. Combined, these studies showed the feasibility of realizing a full-scale CCS project. Based on this outcome the government decided to continue the development of the preferred concepts through a study agreement covering concept and FEED (front-end engineering and design) studies. Gassnova represents the Norwegian state and acts as the coordinating body.	2) Explore the potential development of a large-scale hydrogen demonstrator within the Drax site by as early as the mid-2020s - in line with the CCC's recommendation that hydrogen should be produced at scale in at least one industrial cluster by 2030.  3) Explore the strategic opportunities in developing a cutting-edge hydrogen economy in the region.  The Net Zero Teesside project aims to decarbonise a cluster of carbon-intensive businesses in the North East of England by 2030.  The Northern Lights project is part of the Norwegian full-scale CCS project. The full-scale project includes capture of CO2 from industrial capture sources in the Oslo-fjord region (cement and waste-to-energy) and shipping of liquid CO2 from these industrial capture sites to an onshore terminal on the Norwegian west coast. From there, the liquified CO2 will be transported by pipeline to an offshore storage location subsea in the North Sea, for permanent storage.
Other, please specify Natural carbon sinks	Support	In November 2018 Equinor announces that we are ready to invest in the protection of tropical forests as soon as a well-functioning market is in place for the private sector.  February 2020 Equinor's commitment to invest in protection of tropical forest was integrated into our new climate neutral global operations by 2030 ambition.	Equinor has actively been supporting the development of Emergent, a not-for-profit organization set up to accelerate the speed and scale of tropical forest conservation. Emergent will provide forest credits for the private sector verified by the high-integrity ART standard (Architecture for REDD+ Transactions). REDD+ is reducing emissions from deforestation and forest degradation and the role of



		Equinor is through OGCI supporting the work of the Nature Climate Solutions Alliance, convened by the World Economic Forum and the World Business Council for Sustainable Development.	conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.  The Natural Climate Solutions Alliance aims to scale up affordable natural climate mitigation solutions for achieving the goals of the Paris Agreement on climate change. These include reforestation protection and conservation, livestock, animal and land management, and coastal wetland and peatland restoration, among a wide array of cost-effective solutions.
Other, please specify TCFD	Support	Equinor was a part of the Task Force on Climate Related Financial Disclosure (TCFD) Oil and Gas Preparer Forum, which launched its recommendations in 2018. Equinor participated in a WBCSD panel in 2019 to share our experiences from the Preparer Forum.	Equinor supports the TCFD recommendations and report in line with the TCFD recommendations.

#### 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**

Overall

Is your position on climate change consistent with theirs?

Please explain the trade association's position



Equinor is currently engaged in 97 associations and initiatives within energy and climate that hold an active policy agenda. They have all been informed about Equinor's expectations to industry associations in climate policy. A list of all associations and initiatives is found on www.equinor.com (https://www.equinor.com/en/how-and-why/sustainability/policy-expectations.html).

#### How have you influenced, or are you attempting to influence their position?

During second half of 2019 and beginning of 2020 Equinor conducted an inquiry of all the associations and initiatives to determine whether their respective climate stand is aligned with Equinor's. The review process concluded with material misalignment for one association and some misalignment for two associations (see details below). For the other reviewed associations and initiatives, we concluded with no misalignment. Equinor's policy recommendations, expectations the associations and the review report are found on www.equinor.com (https://www.equinor.com/en/how-and-why/sustainability/policy-expectations.html).

#### **Trade association**

Independent Petroleum Association of America (IPAA)

#### Is your position on climate change consistent with theirs?

Inconsistent

#### Please explain the trade association's position

IPAA has no public statements regarding the human activities influencing climate, support of the Paris agreement or carbon pricing.

IPAA promotes the critical role of natural gas responding to GHG emissions reductions, not only in the United States but internationally. IPAA has stated that it believes the use of natural gas is a key part to any GHG emissions response strategy. IPAA supports the U.S. Environmental Protection Agency's (EPA's) roll-back of U.S. federal methane regulations, while Equinor opposes these changes.

#### How have you influenced, or are you attempting to influence their position?

Equinor believes that IPAA's lack of position on climate leaves the association materially misaligned with Equinor's climate policy and advocacy position. Equinor has assessed our membership and decided not to remain a member of IPAA from 2020.

#### **Trade association**

American Petroleum Institute (API)

#### Is your position on climate change consistent with theirs?

Mixed

#### Please explain the trade association's position

In his State of American Energy Speech in 2020, API President Mike Sommers said that "bold and achievable action on climate change at the global level is essential, and



America's natural gas and oil industry is committed to innovation and leadership to make these ambitions more than just hopes and dreams."

API supports the ambitions of the Paris agreement, including global actions that reduces emissions and alleviates poverty around the world. API has in dialogue with Equinor stated that they believe that API's advocacy is aligned with Equinor's support for the goals of the Paris Agreement, which aim to strengthen global action to reduce GHG emissions while advancing human and economic prosperity.

In January 2020 API launched "Energy for Progress," a campaign highlighting the natural gas and oil industry's leadership in reducing emissions to record low levels and supporting economic and environmental progress in local communities. This included an update of API's policy principles.

API is in the process of reorganizing its structure in order to optimize its policy development and engagement processes. This includes a new committee structure which will better allow for addressing issues such as climate change.

API currently does not have a position on carbon pricing.

API has not opposed EPA's proposal for a roll-back of U.S. federal methane regulations. They have however stated that they support EPA's efforts to adhere to its statutory obligations under the Clean Air Act, as they think the regulation of volatile organic compounds drives down methane emissions and allows for innovation and technological advancements that help environmental performance and strengthen industry's actions to reduce emissions.

#### How have you influenced, or are you attempting to influence their position?

Equinor holds a position on the API Board. We are represented on several API committees: Committee on Federal Relations, State Government Affairs, Communications Committee, Upstream Committee and more.

In line with the Equinor Code of Conduct, we do not contribute to API's funding of political campaigns, political candidates or elected officials. API does not use member dues to fund political donations.

Our assessment of API's climate position and climate policy principles shows some misalignment with Equinor's position. We have however observed a positive shift over recent years reducing the gap. Based on our dialogue with API's leadership we expect further progress. API is actively developing their climate policy position. API has in recent years made progress on climate policy issues, and we expect that they will continue evolving in coming years. Equinor will remain a member of this organization and engage in further developing API's climate position. We will continue to engage with API and work with other members on the API climate policy through our representation on the board and in relevant committees impacting climate and sustainability issues. Areas of our specific attention include expectations to strengthened public API support of the Paris Agreement, efforts for tightening of methane emissions regulations and a



clearer stance on carbon pricing. We have communicated to the leadership of API, that we will argue these topics also in the public domain.

#### Trade association

Australian Petroleum Production & Exploration Association (APPEA)

### Is your position on climate change consistent with theirs?

#### Please explain the trade association's position

APPEA plans to update their Climate Change Policy Principles in 2020 following engagement with members and stakeholders.

The Australian government supports a carryover of credits from the first and second Kyoto protocol periods (2008-2012 and 2013-2020) to satisfy the obligations under the first Paris Agreement period (2021-2030). This may reduce the ambitions of the Paris Agreement. APPEA has no position on carryover of credits and have been referring to the Australian Government's position in their communication. APPEA is advocating for emissions reductions in Australia to support the Paris Agreement ambitions.

APPEA has been criticised for lobbying for exemptions from Australian climate policy for emissions intensive, trade-exposed industries such as LNG production. APPEA's policy position states: "In the event Australia takes action before comparable action is taken by the nations with which we compete, the Australian policy response should maintain the competitiveness of Australian trade exposed industries, such as LNG, by minimizing the costs the industry faces in the absence of a carbon price being imposed on energy sources in customer countries and competitors." We do not see this as APPEA advocating exemptions for LNG from Australian climate policy.

APPEA's position on carbon pricing is set out in APPEA's Climate Change Policy Principle: "deliver lowest cost greenhouse gas emissions abatement through an appropriately designed mechanism that provides an economy-wide transparent price signal to shape business and consumer plans and investments. The mechanism should be efficient, have low compliance costs, and support international trade that recognises different national circumstances." We do not see this as APPEA advocating against a price on carbon.

#### How have you influenced, or are you attempting to influence their position?

Our review concluded that there are some misalignments between APPEA's and Equinor's climate policy position.

Equinor will remain a member of APPEA. We will use our membership position to continue to engage with APPEA by seeking membership of their Climate Change Committee to progress their climate change policy principles in Australia. We will also encourage APPEA to take a clear stand on supporting carbon pricing in Australia and



not supporting carryover of credits from the Kyoto protocol to the Paris Agreement.

#### C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

Yes

#### 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?

Here is the process implemented to ensure a common approach to multiple climate engagement activities across business divisions and geographies consistent with Equinor's strategy on climate change:

- 1) Equinor's corporate climate policy positions was approved by the Corporate Executive Committee and be found on www.equinor.com (https://www.equinor.com/en/how-and-why/sustainability/policy-expectations.html).
- 2) All Equinor employees that engage in dialogue on behalf of the company with industry organizations, policy makers, media or other stakeholders are informed about the corporate positions and requested to use these a basis for their dialogue with local governments and stakeholders.
- 3) Roles and responsibilities for following-up on this are defined in Equinor's governing documents. Equinor's Code of Conduct sets out mandatory requirements for everyone who works on behalf of Equinor, including requirements for lobbying and Public Affairs. All Equinor employees, Board members, and External personnel with IT access must annually confirm in written that they are familiar with and able to comply with the company's Code of Conduct.
- 4) Further roles and responsibilities are defined in the Organisation, management and control (OMC) documents for each Business Area. The documents are easily accessible for available for all employees though our internal Insight site.
- 5) The Corporate Sustainability Unit (CSU) has frequent meetings with the Governmental and Public Affairs team and relevant colleagues in Equinor's Business Areas to make sure positions and strategies for influencing policies and regulations regionally/nationally are aligned with the corporate position. CSU also engages the Corporate Executive Committee (CEC) regularly in climate discussions that also include policy-related topics. We have also developed an internal e-learning on Equinor's climate response and conduct special training for leaders and relevant employees.
- 6) All Equinor's input to regulators and responses to stakeholder consultations should be publicly available.

Here is the process implemented to ensure that there is no material misalignment between our membership industry associations' and Equinor's position on climate change:

1) A list of industry associations and initiatives Equinor is engaged with that hold an active energy and climate policy is found on www.equinor.com (https://www.equinor.com/en/how-and-why/sustainability/policy-expectations.html)



- 2) All the associations on the list have all been informed about Equinor's expectations to our associations on climate policy.
- 3) When we consider entering a new association, we evaluate the alignment with our climate policy and advocacy practice.
- 4) As a part of Equinor's joint statement with Climate Action 100+ we are committed to regularly review and provide information about memberships in industry associations and initiatives on climate change-related topics. Further, we are further committed to addressing potential material misalignment and following up with relevant actions in that regard.
- 5) If an association of which we are a member takes a position that is opposed to our view of effective climate policy, we will advocate to change the association's position. If we don't succeed, we will publicly state our disagreement with the association's position. In the event that an industry association of which Equinor is a member is seen to repeatedly pursue policies and actions that are contrary to reasonable measures to advance the goals of the Paris Agreement, Equinor will notify the association that it membership is under review and will, upon further divergence in the respective positions, exit the association.

Equinor is now reviewing the governance documents to make sure that the processes to ensure alignment within the organisation and with industry associations are properly covered.

#### 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 mainstream reports, incorporating the TCFD recommendations

#### **Status**

Complete

#### Attach the document

Equinor Sustainability report 2019.pdf

#### Page/Section reference

Climate change is specifically addressed in Equinor's Sustainability report's section "Low carbon - Creating a low-carbon advantage" on the pages 14-31. General sustainability management, including climate change management is addressed throughout the entire report.

#### **Content elements**

Governance Strategy Risks & opportunities Emissions figures



#### **Emission targets**

#### 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	Chief operating officer and executive vice president in	Chief Operating Officer
1	Equinor.	(COO)

### Submit your response

In which language are you submitting your response?

English

#### Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

#### Please confirm below

I have read and accept the applicable Terms