Module: Introduction

Page: Introduction

CC0.1

Introduction
Please give a general description and introduction to your organization.

The company was founded as The Norwegian State Oil company (Statoil) in 1972, and became listed on the Oslo Børs (Oslo Stock Exchange, Norway) and New York Stock Exchange (US) in June 2001. Statoil merged with Hydro`s oil and gas division in October 2007. Statoil is an international energy company with operations in over 30 countries. We are headquartered in Stavanger, Norway with approximately 20,500 employees worldwide. We create value through safe and efficient operations, innovative solutions and technology. Statoil's competitiveness is founded on our values based performance culture, with a strong commitment to transparency, cooperation and continuous operational improvement.

Statoil has eight business areas: Development and Production Norway (DPN), Development and Production International (DPI), Development and Production USA (DPUSA), Marketing, Midstream and Processing (MMP), Technology, Projects and Drilling (TPD), Exploration (EXP), New Energy Solutions (NES) and Global Strategy and Business Development (GSB).

Statoil is among the world's largest net sellers of crude oil and condensate, and is the second largest supplier of natural gas to the European market. Statoil also has substantial processing and refining operations. We are contributing to the development of new energy resources; with offshore wind farms in production and new projects under development, and we are in the forefront of the implementation of technology for carbon capture and storage (CCS).

CC0.2

Reporting Year
Please state the start and end date of the year for which you are reporting data.
The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.
Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

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

CC0.3

Country list configuration

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

Select country
Brazil
Canada
Denmark
Norway
United States of America
United Kingdom
Germany
Bahamas

CC0.4

Currency selection

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

USD($)

CC0.6

Modules
As part of the request for information on behalf of investors, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.
If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.
If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below in CC0.6.

Further Information

Forward-looking statements in Statoil's CDP response reflect 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. Even though the reporting period is for 2016, some forward looking information issued in 2017 has been included in the response. One example of this is Statoil's Climate Roadmap, launched in February 2017.

Module: Management

Page: CC1. Governance

CC1.1

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

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

CC1.1a

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

The Board of Directors' (BOD) Safety, Sustainability and Ethics Committee. As of 31 December 2016, the chair of the committee was Roy Franklin. Bjørn Tore Godal, Wenche Agerup, Lill-Heidi Bakkerud and Stig Lægreid were board members (Bakkerud and Lægreid were employee elected board members).

CC1.2

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

Yes

CC1.2a

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

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Corporate executive team	Monetary reward	Emissions reduction target Efficiency target Other: Renewable energy projects	Several members of the corporate executive committee had climate related key performance indicators at their individual scorecards in 2016, and remuneration linked to these KPIs. These included: a)The Chief Executive Officer (CEO): Upstream CO2 intensity*; b) EVP Development and Production Norway: CO2 emission reductions**; c) EVP Marketing, Midstream and Processing: CO2 emission reductions**; d) EVP Technology, Projects and Drilling: Upstream CO2 intensity for projects under development***. e) Global Strategy and Business Development: Upstream CO2 intensity*. *Defined as kg CO2 emitted per barrel of oil equivalent (boe) exported over the expected economic lifetime of the project. **Emission reductions are defined as the CO2 emissions avoided when implementing a measure as compared with business as usual (or Best Available Techniques for new developments) *** Projects under development are defined as projects between decision gates 1 and 4.
All employees	Recognition (non-monetary)	Other: Best practice projects	The CEO's sustainability award is awarded annually, with the purpose of driving and rewarding significant efforts within environment, climate and social responsibility. From 2016 the CEO decided to split the previous CEO's SSU award (Safety, Security and Sustainability) into two categories: The Safety

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
			& Security award and the Sustainability award. This will further strengthen the sustainability and climate area going forward.
EHS manager	Monetary reward	Efficiency target	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@Statoil), 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, including both assessment of "what we deliver" and "how we deliver".

Further Information

The statement on remuneration for Statoil's Corporate Executive Committee describes the remuneration policy and criteria. The statement of remuneration is included in the 2016 Annual Report and Form 20-F, available on our corporate website. We measure progress and results in a holistic way using key performance indicators (KPIs) when relevant, allowing for sound judgement. In our integrated performance process (Ambition to Action) we translate our purpose, vision and strategy into strategic objectives, risks, KPIs and actions.

Page: CC2. Strategy

CC2.1

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

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

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

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	All geographical areas Statoil is operating in or has market exposure in.	> 6 years	More information is available in our 2016 Sustainability report pages 16-18 https://www.statoil.com/content/dam/statoil/documents/sustainability-reports/sustainability-report-2016-v2.pdf

CC2.1b

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

Our enterprise risk management process provides a holistic, bottom-up and top-down framework for managing risks across the company. Risk management is an integral part of all business processes; informing strategies, target setting, investment decisions and operations. The corporate risk picture is built up from; input across the organization, activity to country and business area and through a biannual process. Monetary, safety and integrity risk and potential reputational effects are assessed at all levels. The risks are described through identification of sources and causes (so called risk factors), including climate change related physical, regulatory, market and reputational risk factors. The risk map and risk issues radar are presented both to the Corporate Executive Committee, the Board of Directors and their respective committees. An in-depth overview of relevant health, safety and security risks and sustainability risks factors and risk issues (including climate-related risks factors) is presented to the Board of Directors' Safety, Sustainability and Ethics Committee. We complement our regular enterprise risk assessment with tools that more specifically address the robustness of our project portfolio with regards to climate change. Statoil apply tools such as internal carbon pricing, scenario planning and stress testing of projects against various oil and gas price assumptions. We regularly assess how the development of technologies and changes in regulations, including the introduction of stringent climate policies, may impact the oil price, the costs of developing new oil and gas assets, and the demand for oil and gas. These assessments are incorporated into our scenarios (see 2016 Sustainability report page 75) and economic planning assumptions.

CC2.1c

How do you prioritize the risks and opportunities identified?

Risk management includes identifying, evaluating and managing, both upside (so called opportunities) and downside risks, in all our activities in order to support Statoil’s principal objectives, to create value and avoid incidents. A specific risk is described in terms of the impact, probability and uncertainty (i.e. strength of background knowledge) of a deviation (upside (so called opportunity) or downside) from a specified reference value (i.e. expectation, most likely case, forecast, median percentile or target). The need for measures to manage the deviation is then assessed. Desired performance level and delivery (established by the risk

owner) together with cost benefit analysis are used to decide on the actions required to retain or adjust the risk level (i.e. exploit, share/transfer, accept, mitigate, avoid, monitor). The desired performance level and delivery reflect the established strategic objectives and key performance indicators, as well as compliance with relevant policy and regulatory and corporate requirements that together support the principal company objectives to create value and avoid incidents. These are managed through our holistic integrated performance process, covering five performance perspectives, namely: people and organization; health, safety and environment; operation; market and finance. Measures that make a facility or activity inherently safer are given priority. The management measures are established to address the specific risk factors (including climate related risk factors) that are the main sources or causes of the deviation. The time horizon typically used for our risk management process is forward looking - 12 months. For consideration of the potential risk picture for the longer term we use the risk issues radar. This enables us to look at emerging issues and risks and risk factors with a high level of uncertainty with respect to the nature and extent of the impact and timing of the effect.

CC2.1d

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

Main reason for not having a process	Do you plan to introduce a process?	Comment

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

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

i) How the business strategy has been influenced;

A cross-organisational process was initiated in March 2016 to develop a climate roadmap that was incorporated into Statoil's overall corporate strategy assessment. The sharpened corporate strategy was approved in December 2016 and announced to the markets in February 2017. In response to the ambitions set by the Paris climate agreement and the risks and opportunities associated with the long-term transition to a low carbon energy future, our climate roadmap sets out an action plan to 2030: Building a high value, lower carbon oil and gas portfolio. Create a material industrial position in new energy solutions. Accountability and collaboration.

ii) Example of how the business strategy has been influenced;

Statoil's corporate strategy constitutes four main principles that are designed to shape our portfolio of assets: Cash generation at all times; capex flexibility; capture value from cycles and low carbon advantage. Our climate roadmap represents the “low carbon advantage” aspect of our sharpened business strategy. Climate change influences Statoil’s business strategy in two distinct ways. First by addressing climate related business risk, whether physical, political, market or reputational. Second by identifying business opportunities that could arise from the transition to a low carbon future.

iii) What aspects of climate change have influenced the strategy;
The most important aspects of climate change influencing our strategy are energy market transformation, policy changes and technology development. We build our portfolio according to our strategy principles "Always safe, High value, Low carbon" to stay competitive in a carbon constrained world.

iv) How the short term strategy has been influenced by climate change;
In our short term strategy, maintaining a competitive carbon footprint in our own operations is essential. To achieve this, we have established an ambitious carbon intensity target for 2020 (9kg CO2/boe produced). Industry average is 17kg CO2/boe produced.

Furthermore, our strategy sets out a target for 25% of our R&D spending to be spent on low carbon technologies and energy efficiency, by 2020.

Over the last year we have through our recently established New Energy Solutions business area made investments in offshore wind.

v) How the long term strategy has been influenced by climate change;
Statoil is one of the world’s most carbon efficient oil and gas producers, and our ambition is to maintain this position. To achieve this, we have established carbon intensity targets (8kg CO2/boe produced) for our operated upstream production and an emission reduction target for 2030.

We expect that 15-20% of our investments in 2030 will be in renewables and other new energy solutions.

We apply a minimum internal carbon price of USD 50 per tonne CO2 to all projects.

vi) How is this gaining a strategic advantage over your competitors;

Statoil is already a leader in the industry on carbon intensity. CDP recently ranked us as the oil and gas company best prepared for a low carbon future. Now we are further embedding climate into our strategy. We do this in two ways: First, we are building a high value oil and gas portfolio with a lower carbon footprint, ensuring that the right hydrocarbons are produced and that they are produced as efficiently as possible. Second, we are building a material industrial position in new energy solutions. This long-term perspective is designed to make us more competitive, supporting the ambitions set out in the Paris climate agreement.

Statoil is providing millions of people with energy every day. We embrace the energy transition as an opportunity for sustainable growth. Maintaining our position as an industry leader in carbon efficiency while growing renewables and low carbon energy solutions will help Statoil to manage the energy transition smoothly – and at the same time position us to ensure a competitive advantage in a low carbon world.

vii) What have been the most substantial business decisions made during the reporting year that have been influenced by the climate change driven aspects of

the strategy;

- Sharpened strategy, with "low carbon" as core principle. Developed and approved in 2016. Launched on Capital Markets Update, February 2017.
- Corporate Executive Committee and Board of Directors' approval of the climate roadmap which lays out how our business will support the ambitions of the Paris agreement;
- The Statoil Energy Ventures fund was established in February 2016 as part of Statoil's business within New Energy Solutions, reflecting the company's aspirations to gradually complement its oil and gas portfolio with profitable renewable energy and low-carbon solutions.
- Investment decision in Arkona, a 400 MW offshore windpark outside Germany. This is a step towards our plan of providing 1 million European homes with renewable energy within 2020;
- The Norwegian government is planning a large scale pilot project for offshore storage of CO2 from land-based industry. In a study in 2016 Statoil confirmed the feasibility of offshore carbon storage and delivered an offer as part of the tender process for the next phase.
- In December 2016, Statoil won the federal lease sale for the New York Wind Energy Area, and Statoil is now gearing up development activity.

Sources:
https://www.statoil.com/content/dam/statoil/image/how-and-why/climate/A5-climate-roadmap.pdf
https://www.statoil.com/content/statoil/en/news/german-offshore-wind-market-eon.html

viii) How the Paris Agreement has influenced the business strategy (e.g. the process of transition planning alongside the ratcheting of Intended Nationally Determined Contributions (INDCs));

See vii) Our Climate Roadmap - Paris statement.

Our scenarios include a Renewal scenario which is broadly aligned with a 2°C temperature increase. See ix).

ix) Forward-looking scenario analyses, including a 2°C scenario, to inform our organization's businesses, strategy, and/or financial planning?

Statoil has assessed the sensitivity of the project portfolio against the International Energy Agency's 450 ("two degree") scenario (World Economic Outlook 2016). The stress test demonstrated a positive impact of around 5% on Statoil's net present value (see reply to CC5.1a). See Sustainability report 2016 page 17-19 for details. https://www.statoil.com/content/dam/statoil/documents/sustainability-reports/sustainability-report-2016-v2.pdf

Every year we issue our report "Energy perspectives". Uncertainties in the development in the energy markets are reflected in the three scenarios for the years up to 2050 in this report.

CC2.2b

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

CC2.2c

Does your company use an internal price on carbon?

Yes

CC2.2d

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

Our conventional oil and gas projects in Norway have a relatively low carbon intensity and are already subject to
CO2 costs of approximately USD 59 per tonne, reflecting the cost of the Norwegian offshore CO2 tax in addition to EU ETS quotas. Over 60 % of our equity production takes place in Norway. For projects outside of Norway, we incorporate an internal price on carbon of USD 50/ tonne CO2 in our investment analysis. Thus, a significant increase of the cost of carbon up to USD 140 per tonne of CO2 equivalent in 2040 (as stipulated in the IEA 450 scenario) would only marginally impact the NPV for these projects. Our projects in shale oil and heavy oil are less robust towards higher carbon prices due to their higher carbon intensity. To some extent, the greater flexibility in cost and production of shale oil counterbalances this impact in terms of resilience compared to other projects.

CC2.3

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

Direct engagement with policy makers
Trade associations
Funding research organizations

CC2.3a

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

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Cap and trade	Support	Contributing to position papers by IETA, IOGP and Business Europe. Statoil engages directly with policy makers in key markets.	Supporting the strengthening of EU ETS; including support to Market Stability Reserve, and ambitious 2030 GHG target for the EU.
Cap and trade	Support	Member of steering committee of the International Emission Trading Association's B-PMR, to support building on carbon markets initiatives around the world. Statoil is a founding Member of The World Bank's Carbon Pricing leadership Coalition.	Statoil actively advocates for an international price on carbon and supports initiatives on carbon pricing and linking of carbon market schemes through direct engagement with stakeholders and conference speeches.
Energy efficiency	Support with minor exceptions	Introduction of emission performance standards in the power sector in the USA.	112 d and 112 f power plant rules in the USA.
Other:	Support	Norway aims to be included in EU's 2030 climate target of 40 % reduction from 1990 to 2030.	Endorsed by Norwegian Parliament March 2015. Statoil is a member of Norwegian government’s climate council. Furthermore, we are also a member of Norway 20-30-40 business coalition to promote energy transition and green competitiveness.
Regulation of methane emissions	Support with minor exceptions	Statoil has undertaken a number of activities to respond to regulatory developments in US and Norway and is progressing on the objectives for methane improvement activities. In response to the (former) Obama Administration’s increased focus on methane emissions, Statoil has been actively engaged on two fronts: (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. In Norway, Statoil, and other industry peers, have been collaborating with the Norwegian Environment Agency (NEA) to improve the identification and quantification of methane and NMVOC emissions, and evaluate the possibilities for further emission	In 2015, the Obama administration announced a new goal to cut methane emissions from the oil and gas sector by 40-45% from 2012 levels by 2025. US Environmental Protection Agency (US EPA) has announced a series of voluntary and regulatory steps to comply with this goal. To encourage industry to voluntarily control emissions from existing sources, the US EPA officially launched the Natural Gas STAR Methane Challenge program in 2016. In June 2017, US President Trump announced US withdrawal from the Paris Climate Agreement. Thus, the future of regulatory framework in the US remains uncertain. Regardless of the outcome of regulations, Statoil continues to work towards lowering its carbon footprint across US operations. Statoil has taken discrete steps to address methane, NMVOC and CO2 emissions. Since 2014, Statoil developed a comprehensive US Onshore Emissions Reduction Program that focusses on: (i) operational improvements – Statoil has implemented a voluntary leak detection and repair program and has invested significant capital to modify/upgrade facility designs to minimize fugitive emissions from process equipment and capture flare gas; (ii) technology – Statoil is collaborating with a breadth of industrial and academic partners to accelerate the technology development of methane sensing and mitigation technologies; (iii) outreach – Statoil has joined the OneFuture coalition in order to facilitate greater policy and technology outreach with industrial partners and regulatory agencies. As part of the Norwegian government's action plan on methane, the Norwegian Environment Agency (NEA), in close cooperation with industry, initiated, in 2014, a project to improve methane and non-methane volatile organic compounds (NMVOC) management and reporting on the NCS. Through this project: • a comprehensive mapping of all potential sources for direct emissions of methane and

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		reductions for existing and future operations. A key deliverable from this work was an update of the quantification methodologies for the regulatory reporting on methane and NMVOC emissions. 2016 represents the first year in which Statoil utilized these updated quantification methodologies for the reporting of methane and NMVOC emissions from our upstream activities on the Norwegian Continental Shelf. In addition, Statoil has developed corporate principles on methane regulations to address: • How avoidable methane emissions in the oil and gas sector should be eliminated • Target the most significant emissions sources • Harmonisation of relevant monitoring, reporting and verification standards of methane emissions • Build upon industrial experiences and initiatives • Realistic reduction timeframe • Disclosure of methane emissions data. Statoil has also 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. Statoil is also a founding member of Climate and Clean Air Coalition Oil and Gas Methane Partnership.	NMVOC emissions has been undertaken • quantification methodologies have been assessed and updated • reduction potentials for emission sources have been assessed. A key deliverable from this work was updated quantification methodology for the regulatory reporting on methane and NMVOC emissions, which Statoil implemented from the calendar year 2016. A summary report in English is available at the Environment Agency's website. http://www.miljodirektoratet.no/Documents/publikasjoner/M515/M515.pdf

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Other:	Support	Sent letter to White house in the US, urging the US government to stay in the Paris agreement.	Statoil urging the US government to stay in the Paris agreement.

CC2.3b

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

Yes

CC2.3c

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

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
American Petroleum Institute	Mixed	In favour of industry developed standards to reduce emission reductions. Less in favour of federal climate regulations and legislation in the US.	Statoil is a relatively small operating company in the US and has only limited influence on API's positions on climate change. However, we inform API when we disagree on positions they are taking.
International Emission Trading Association	Consistent	Promoting market-based climate change legislations around the world.	Actively participating in working groups on different topics. Provide direct input to positions papers.
Center for Environment Policy Studies (CEPS)	Consistent	Discussing international climate negotiations and market based climate legislations around the world.	Actively participating in working groups on different topics. Provide direct input to positions papers.
IPIECA	Unknown	Not advocating on climate change legislation.	Not applicable as IPIECA does not do policy advocacy.
International Association of Oil and Gas Producers, IOGP	Mixed	To represent and advocate industry views by developing effective proposals based on professionally established technical arguments in a societal context.	Has a different view than IOGP on EU climate and energy policy and is providing input to position papers to adjust IOGP's position.

CC2.3d

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

No

CC2.3e

Please provide details of the other engagement activities that you undertake

CC2.3f

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

Statoil has developed corporate climate positions that are aligned with our climate change strategy. The Corporate Sustainability Unit has frequent meetings with the Governmental and Public Affairs team and relevant colleagues in Statoil's Business Areas in order to develop and align positions and strategies for influencing policies and regulations globally and regionally/nationally. Furthermore, we have a designated Policy Reference Group which consists of representatives from all Business Areas where the purpose is to make sure that our activities that influence policy are consistent with Statoil's corporate positions on climate change. The policy group meets periodically. Statoil employees that engage in dialogue on behalf of the company with industry organizations, policy makers, media or other stakeholders are required to use corporate policies and positions as a basis for the dialogue, according to Statoil's Code of Ethics. Furthermore, leaders receive training in the subject of climate change how Statoil approaches this. We upload our policy positions and respond to consultations on our website. We aim for openness and transparency in our policy dialogue and aim to ensure that our employees are familiar with Statoil's positions on dedicated policy proposals. There are cases where we have different opinion than the industry organisations we are member of (for example IOGP positions on free allowances for offshore Oil and Gas, API position on US power plant rules). In such cases we are trying to revert the position of the business organization, or, if that is not possible, we inform the business organizations in writing as to the reasons why we cannot support the proposed statement.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

Ref. CC2.3d. Statoil is involved in more than 1000 ongoing research projects. Out of practical reasons a complete list of all funded research projects does not exist.

Page: CC3. Targets and Initiatives

CC3.1

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

Absolute target
Intensity target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 1	73%	20%	2016	14802856	2030	No, but we anticipate setting one in the next 2 years	We are committed to delivering energy CO2 emission reductions of 3 million tonnes of CO2 per year by 2030, compared to the start of 2017.
Abs2	Scope 1	73%	14%	2007	10842069	2020	No, but we anticipate setting one in the next 2 years	For our offshore operations in Norway, we are committed to delivering CO2 emission reductions of 1.2 million tonnes of CO2 per year by 2020, compared to 2007. The original target set in 2008 was to save 800,000 tonnes of CO2 per year by 2020. Over 250 large and small energy efficiency projects

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
								implemented by the end of 2016 enabled us to achieve that target already in 2015. As a result, we have raised the 2020 target by 50%.

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1	66%	8%	Metric tonnes CO2e per barrel of oil equivalent (BOE)	2016	9.8	2020	No, but we anticipate setting one in the next 2 years	Upstream scope 1 emissions included in intensity target. This equals around 2/3 of scope 1 emissions.
Int2	Scope 1	66%	18%	Metric tonnes CO2e per barrel of oil equivalent (BOE)	2016	9.8	2030	No, but we anticipate setting one in the next 2 years	Upstream scope 1 emissions included in intensity target. This equals around 2/3 of scope 1 emissions.

CC3.1c

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

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	8	No change	0	We have established a KPI and a 2020 target of 9kg CO2/barrel of oil equivalent (boe) for our upstream (exploration and production) activities. We believe that the target is ambitious, but achievable, and it reflects our ambition to be an industry leader in carbon efficiency. To further enhance this ambition, upstream carbon intensity is incorporated as a key performance indicator at corporate level. However, it should be noted that the development in absolute scope 1 emissions is dependent on overall production. This target doesn't have a direct link to absolute emissions; the change given in this table is therefore the reduction in absolute emissions if the intensity target is achieved and the production portfolio remains as in 2016.
Int2	Decrease	18	No change	0	The corporate KPI on kg CO2/barrel of oil equivalent (boe) for our upstream (exploration and production) activities has a long term target in 2030 of 8. This is a tough, but still achievable target. However, it should be noted that the development in absolute scope 1 emissions is dependent on asset portfolio and production development. Since this target doesn't have a direct link to absolute emissions, the change given in this table is the reduction in absolute emissions if the intensity target is achieved and the production portfolio remains as in 2016.

CC3.1d

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

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

CC3.1e

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

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	0%	1%	We are on track with delivering reductions towards 2030. First quarter 2017 reported 25000 tons saved through reduction measures.
Abs2	69%	83%	1 million tons reported saved as a part of the KONKRAFT target.
Int1	0%	0%	Preliminary results for 2017 indicate progress towards reaching this target.
Int2	0%	0%	Preliminary results for 2017 indicate progress towards reaching the 2030 target.

CC3.1f

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

CC3.2

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

Yes

CC3.2a

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

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Product	Low Carbon Electricity (Offshore wind) in UK .The operating wind farms currently deliver renewable energy to more than 200,000 households in the UK. Production of electricity from the 317MW Sheringham Shoal Offshore Wind Farm, located off the coast of North Norfolk in the UK, comprises 88 wind turbines and generates around 1.1TWh per annum. Providing clean energy to households substituting electricity from coal plants or gas power plants. Lower Emission Factor (gr CO2eq/KWh) than average UK Grid. This is enough clean energy to power almost 220,000 British homes and reduce CO2 emissions by about 450,000 tonnes every year based on the current UK generation mix (443 g CO2e/kWh, DUKES 2013) . Over the lifetime of the project (20 years)	Low carbon product	Other:		More than 10% but less than or equal to 20%	Our approach to business and growth opportunities within renewables and new energy solutions includes both commercial investments and research and development (R&D): • We have made investments in offshore wind projects. • We continue to be engaged in carbon capture and storage (CCS). • A significant proportion of our R&D efforts address energy efficiency, carbon capture and renewables. • We have established an R&D partnership with General Electric (GE) to find sustainable solutions for the oil and gas industry. In May 2015, Statoil announced a new business area for New Energy Solutions to drive further profitable growth within these areas. This reflects our aspirations to gradually complement our oil and gas

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
	this would avoid about 9.7 million tonnes CO2.					portfolio with profitable renewable energy and other low-carbon energy solutions. Our current offshore wind portfolio consists of ownership shares in the operating fields Sheringham Shoal and Hywind Demo and the development of the Dudgeon, Hywind Scotland, Hywind New York and the Dogger Bank projects.
Product	Fuel switch: Exporting Gas to Europe. Through Statoil's export of gas to Europe consumers get access to cleaner energy supply compared to use of coal and indirectly enable customers to avoid CO2 emissions.	Avoided emissions	Other:			Norwegian natural gas accounts for more than 20 % of Europe's total natural gas consumption. In 2016 Statoil exported 305 million boe of natural gas to Europe. This represents about two-thirds of Norwegian gas to Europe. Statoil's export of gas to Europe varies from year to year, but is in the order of 400 TWh. This excludes gas that Statoil sells on behalf of others such as the Norwegian state. A significant amount of the gas that Statoil 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

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

CC3.3

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

Yes

CC3.3a

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

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	50	60000
To be implemented*	6	90500
Implementation commenced*	3	36959
Implemented*	50	250940
Not to be implemented	2	3000

CC3.3b

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

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Implemented new procedures of HP/LP distillation columns in order to optimize the energy consumption.	5400	Scope 1	Voluntary	510000	12000	<1 year	>30 years	Location Tjeldbergodden.
Energy efficiency: Processes	Increased routing of heat to HP column instead of stabilizer column to reduce the LP steam consumption.	2300	Scope 1	Voluntary	228000	12000	<1 year	>30 years	Location Tjeldbergodden.
Energy efficiency: Processes	Feed water turbine set to stand-by with 2 electric pumps running. Resulting in reduced steam consumption and reduced fuel gas consumption in auxiliary boiler.	8400	Scope 1	Voluntary	834000	12000	<1 year	>30 years	Location Tjeldbergodden.
Energy efficiency: Processes	Reduced flaring in wintertime due to changed procedure. A crossover routing of LP gas makes this possible.	600	Scope 1	Voluntary	60000	35000	<1 year	>30 years	Location Kårstø.
Energy efficiency: Processes	Replace flood light with LED. Gives reduced fuelgas consumption.	2500	Scope 1	Voluntary	230000	780000	4-10 years	>30 years	Location Hammerfest.
Process emissions reductions	Reduce flaring during trip. Vent upstream slugg catcher closed, which increases the pressure and reduces the need for fuelgas. First step executed.	8000	Scope 1	Voluntary	760000	11000	<1 year	>30 years	Location Hammerfest.
Energy efficiency: Processes	Change of operation of destillation tower T-113 (naphta). Boiling is reduced giving less steam consumption.	3200	Scope 1	Voluntary	302000	11000	<1 year	>30 years	Location Mongstad.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Change of operation to stabilize the Gudrun condensate before loading to boat. Reduced gas consumption for the VOC unit.	3200	Scope 1	Voluntary	302000	55000	<1 year	>30 years	Location Kårstø.
Energy efficiency: Processes	Reduction of pressure between Statpipe sales gas and booster compressor.	400	Scope 1	Voluntary	37000	11000	<1 year	>30 years	Location Kårstø.
Process emissions reductions	Reduced flaring during turnarounds due to propan is heated and rerouted to carvernes instead of flare.	200	Scope 1	Voluntary	19000	11000	<1 year	>30 years	Location Kårstø.
Energy efficiency: Processes	Commence two turbo expanders. Reduced gas consumption.	5500	Scope 1	Voluntary	520000	11000	<1 year	>30 years	Location Hammerfest.
Energy efficiency: Processes	Increased dimension of vent to strippersteam (C-205). Reduced loss of steam, and reduced steam purchased.	2600	Scope 1	Voluntary	245000	11000	<1 year	>30 years	Location Kalundborg.
Energy efficiency: Processes	Improved the heat-insulating of the destillation tower from 10 cm to 35 cm.	270	Scope 1	Voluntary	25500	56000	1-3 years	>30 years	Location Kalundborg.
Energy efficiency: Processes	Improved the heat-insulating of the destillation tower from 10 cm to 35 cm.	3530	Scope 1	Voluntary	330000	110000	<1 year	>30 years	Location Kalundborg.
Process emissions reductions	New procedure for tank circulation during loading of tankers. Reduced flaring due to less circulation now before loading.	200	Scope 1	Voluntary	19000	11000	<1 year	>30 years	Location Kårstø.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	A modification has improved the vent regulation of the regeneration of drier mass. Reduced flaring.	5000	Scope 1	Voluntary	460000	6600000	11-15 years	>30 years	Location Kårstø.
Energy efficiency: Processes	Change of prioritization between export pipelines in collaboration with Gassco. Reduced counter pressure reduced a lot of fuel gas consumption.	12000	Scope 1	Voluntary	1100000	22000	<1 year	>30 years	Location Kårstø.
Process emissions reductions	New procedure for start-up NGL plant after trip without flaring.	4800	Scope 1	Voluntary	450000	11000	<1 year	>30 years	Location Kollsnes.
Process emissions reductions	Closed sour gas flare and redirected flow, will save pilotgas og assistgas.	3100	Scope 1	Voluntary	300000	19000	<1 year	>30 years	Location Mongstad.
Energy efficiency: Processes	Change of rotor in air compressor. Gives 2 % less energy consumption.	2600	Scope 1	Voluntary	245000	2600000	11-15 years	>30 years	Location Mongstad.
Energy efficiency: Processes	4 minor measures: Change to LED lights and UPS.	100	Scope 1	Voluntary	9400	210000	21-25 years	>30 years	Location Kalundborg.
Energy efficiency: Processes	Change of mixer in FDO to TK-1391.	100	Scope 1	Voluntary	9400	110000	11-15 years	>30 years	Location Kalundborg.
Energy efficiency: Processes	Change of vent to stripper steam reduces loss of steam and increased heat utilization.	2600	Scope 1	Voluntary	245000	11000	<1 year	>30 years	Location Kalundborg.
Energy efficiency: Processes	Optimalized energy consumption in HP/LP destillation column, phase 2.	5400	Scope 1	Voluntary	510000	110000	<1 year	>30 years	Location Tjeldbergodden.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Optimized auxiliary boiler, incl. change of rotor, reduces fuel gas consumption.	16000	Scope 1	Voluntary	1510000	110000	<1 year	>30 years	Location Tjeldbergodden.

CC3.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Compliance with external requirements: Statoil's operations in Europe are subject to emissions allowances according to the EU Emissions Trading System (EU ETS). Statoil'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 to the requirements are followed up locally and are continuously being monitored by the authorities during frequent audits. In the US, the Environmental Protection Agency has taken steps to regulate greenhouse gas emissions under the Clean Air Act authority by proposing a Clean Power Plan (CPP). The plan aims to reduce emissions from the US power sector by setting performance standards for power plants. In 2015, the EPA also proposed new source performance standards, in addition to those issued in 2012, targeting volatile organic compound emissions, that are intended to further reduce oil and gas methane emissions. For our US operations, the USEPA's new source performance standards (NSPS) on the federal level set restrictions on venting gas so that gas from hydraulic fracturing flowbacks, tank ventilations systems, etc., is captured and flared or put in the sales line instead of being vented to the atmosphere. In North Dakota, however, the state additionally requires operators to implement a gas capture plan to reduce the amount of produced gas being flared thereby increasing the volume of gas going to sales in a phased approach to 2020. Regulations on methane emissions in the USA are likely to be revised over the next years with

Method	Comment
	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 requires a formal dispensation and a mitigation plan.
Dedicated budget for energy efficiency	Statoil'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	Statoil's total R&D investment has been app. 300 million USD on average per year for the last three years. Investments in R&D for carbon reduction technologies such as energy efficiency programme, CCS, offshore wind technologies, energy storing technology and geothermal has received approximately 17% of the annual R&D investment budget. (See 2016 Sustainability report page 24).
Employee engagement	Encouraging cycling to work, arranging for Company buses for transportation between airport and offices and providing bus transportation for commuters between hotel and offices (for larger offices) to reduce use of individual taxi. Approximately 7000 Statoil employees participated in the "Sustainability matters" communication campaign running up to the COP21. Throughout 2017 we run "Climate Ambassador training" for our employees, in order to create employee knowledge of and engagement in Statoil's climate roadmap.
Internal price on carbon	We consider the potential cost of a project's CO2 emissions in all investments decisions. See CC2.2d for further details.
Internal incentives/recognition programs	Annual CEO Safety and Sustainability (SSU) Award. This is a price which could be proposed by anyone in the organization. In 2015 the CEO SSU award was given jointly to the energy network in Development & Production Norway, and our U.S. Onshore Emissions Reduction Program.
Other	Konkraft commitment. Target ID: Abs.2 (Listed in question 3.1a). Konkraft, 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.
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	In cooperation with Gassnova (which represents the Norwegian government in CCS matters), Norske Shell and Sasol, Statoil started up the Carbon dioxide Technology Centre Mongstad (TCM) in 2012. The 600 million USD test centre is unique in the global context. Two different technologies can be tested on two different exhaust gas sources (Combined heat and power plant and refinery). This makes the findings from TCM relevant to both gas- and coal-fired power plants.

CC3.3d

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

Further Information

A complete list for Statoil's business area MMP's reduction measures has been inserted in CC3.3b. This list gives a representative picture of the types of measures implemented, not only in MMP but across the company.

Page: CC4. Communication

CC4.1

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

Publication	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	2.10 Risk review; 2.11 Safety, security and Sustainability; CEO letter (page 7)	https://www.cdp.net/sites/2017/32/23132/Climate Change 2017/Shared Documents/Attachments/CC4.1/statoil-2016-annualreport-20-F.pdf.pdf	
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	Section 1 and 3	https://www.cdp.net/sites/2017/32/23132/Climate Change 2017/Shared Documents/Attachments/CC4.1/sustainability-report-2016-v2.pdf	Our sustainability report has been prepared on the basis of the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines, including the Oil and Gas Sector Supplement. As a supplement, our reporting is informed by the IPIECA Oil and gas industry guidance on voluntary sustainability reporting. We regard our sustainability report to be our Communication of Progress report to the United Nations Global Compact. In our opinion, we meet the requirements for the

Publication	Status	Page/Section reference	Attach the document	Comment
				Global Compact Advanced reporting level. The report is externally assured by KPMG. The external assurance concludes that the report is presented fairly, in all material respects, in accordance with the Sustainability Reporting Guidelines (G4) of the GRI.

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

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

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

CC5.1a

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Carbon taxes	Statoil expects greenhouse gas emission costs to increase from current levels beyond 2020 and to have a wider geographical range than today. We expect EU ETS emission allowances prices to increase after 2020. This could impact operational costs, but it could also represent a competitive advantage for Statoil due to our relatively low carbon intensity compared to the oil and gas industry average, and the fact that Statoil already takes future higher carbon costs into account when making investment decisions. A higher cost of carbon could also benefit gas compared to coal. Statoil's operations in Norway, which represent around 2/3 of Statoil's equity production volumes, are already	Increased operational cost	3 to 6 years	Direct	Very likely	Low	Statoil has assessed the sensitivity of the project portfolio against the International Energy Agency's 450 ("two degree") scenario (World Economic Outlook 2016), including the carbon price assumptions in this scenario. The analysis demonstrated a positive impact of around 5% on Statoil's net present value when replacing our own planning assumptions (oil, gas and carbon prices) with the IEA 450 scenario assumptions. For illustration purpose: According to Forbes list, Statoil's market value in May 2017 was 56,2	Our management method includes the use of a internal carbon price and evaluation of carbon intensity in our investment decisions, the use of energy scenarios to inform our strategy and planning, 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 50 after 2020 in all investment analysis pertaining to projects after 2020, to ensure that the effect of a potential higher future carbon cost is taken into account in our	See "Estimated financial implications" for indirect costs.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	subject to both Norwegian carbon tax and EU ETS emission allowances. The combined cost of these in 2016 were around USD 59 per tonne of CO2. We believe that Statoil is well prepared for potential increased carbon costs due to our ambition to sustain industry leadership in carbon efficiency towards 2030, by combining the use of internal carbon pricing and focus on reducing costs.						billion USD. 5% of this value equals an increase of 2,8 billion USD. Oil and gas prices are the primary drivers for this impact, whereas carbon price has less impact, The impact varies between projects and regions. The calculation is based on Statoil's and the IEA's assumptions which may not be accurate and which are likely to change over time. Accordingly, there can be no assurance that the assessment is a reliable indicator of the actual impact of climate change on Statoil.	investment decisions, and to make our project portfolio robust toward such potential increases. For project in Norway, we apply the actual carbon cost (around USD 59 per tonne CO2 in 2016). Additionally, we stress test our project portfolio (including exploration projects) against the IEA 450 scenario (broadly aligned with a maximum two degree global warming), including the future carbon price assumptions in this scenario.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other regulatory drivers	New offshore field developments in Norway are required to assess power from shore in the design phase and, if profitable, implement this. If power from shore solutions were to become a mandatory requirement irrespective of the level of investment cost, this could impact investment costs and decisions for some new projects. A potential mandatory requirement to use power from shore for the offshore field development Johan Castberg(Norway) would likely lead to increased investment costs and/or project delays. The Plan for development and operations (PDO) for Johan Castberg is pending government approval in 2018.	Increased operational cost	1 to 3 years	Direct	Unlikely	Medium	Costs related to power from shore solutions are asset/field-specific. The estimated cost of a power from shore solution for Johan Castberg was presented in the proposed “Impact assessment program” in September 2016, where it was concluded to not include electrification in the development. Including optionality for future electrification will still be evaluated. Costs related to power from shore solutions are asset/field-specific. The estimated cost of a power from shore solution for Johan Castberg was presented in the proposed	Statoil is working with Norwegian authorities and other partners to develop a cost-effective policy framework for future oil and gas operations on the Norwegian Continental Shelf that will allow Norway to reach its climate targets while ensuring that the development of the Norwegian oil and gas resources will be economically viable in the coming years. Statoil together with the rest of the oil and gas industry in Norway has set a target to reduce emissions at the Norwegian Continental Shelf with 1.8 million tonnes/year by 2020 compared to 2007 (Konkraft	There are no significant costs associated with stakeholder engagement activities. Investments in energy efficiency and emission reduction efforts however, represent significant investments. In 2016, energy efficiency R&D spend was around USD 33.7 million (includes projects with energy efficiency as primary or secondary effect).

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							“Impact assessment program” in September 2016, where it was concluded to not include electrification in the development. Including optionality for future electrification will still be evaluated. On a general note electrification have significant abatement costs. Cost will depend on technical feasibility, distance, power need, lifetime and alternative cost. Some early estimates suggest abatement cost up to 800 USD/tonne CO2 saved.	target). This allows for a broader portfolio of emission reduction efforts to be assessed, taking into account both emission reduction potential as well as costs and project economy.	
Uncertainty surrounding	There is considerable uncertainty regarding future state and	Increased operational cost	3 to 6 years	Direct	About as likely as not	Unknown	The compliance costs related to potential	Statoil joined the Climate and Clean Air	Costs incurred are mainly related to asset-

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
new regulation	federal level US regulations of methane emissions from oil and gas production. Potential future stricter regulation at state and/or federal level could imply increased compliance costs for Statoil's onshore shale operations in the USA due to requirements to change or improve existing equipment, whereas lack of regulation could lead to uncertainties about the carbon footprint of natural gas and the role of natural gas in a climate change perspective.						upcoming regulations on existing emission sources will depend on the nature of the regulation.	Coalition (CCAC) Oil and Gas Methane Partnership in 2014; As a member company, Statoil is committed to surveying selected assets and evaluating emissions reduction opportunities. We are surveying methane emissions and implementing methane reduction measures for our US onshore operations as part of Statoil's Climate Roadmap project. An updated methane emission baseline will be established in 2017.	specific emissions identification and reduction activities. .

CC5.1b

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management

CC5.1c

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Uncertainty in market signals	Different energy scenarios show different long-term outlooks for oil and gas demand, depending on amongst others assumptions regarding climate policies, technology development and consumer behaviour. There are significant uncertainties both regarding predictions of	Reduced demand for goods/services	>6 years	Indirect (Client)	Unknown	Medium-high	Statoil has assessed the sensitivity of the project portfolio against the International Energy Agency's 450 ("two degree") scenario (World Economic Outlook 2016). The stress test demonstrated a positive impact of around 5% on Statoil's net present value (see reply to CC5.1a). The	Our management method includes R&D, technology development, diversification into new products/services (e.g. renewables/new energy solutions), carbon intensity and reduction targets as well as monitoring of climate related risks. See Statoil "Climate Roadmap" for information on how climate considerations is embedded in	In 2016, Statoil spent around USD 52 million on low carbon R&D effort (renewables, CCS and energy efficiency). This represents approximately 17% of Statoil's total R&D spend for 2016. See Estimated Financial Implications regarding New energy solutions investments. "Low carbon" is

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	total energy demand as well as the energy mix. However, oil and gas continues to be a substantial part of the world's energy scenarios in 2040 in recognized energy scenarios, including the IEA 450 ("two degree") scenario.						stress test is based on Statoil's and the IEA's assumptions which may not be accurate and which are likely to change over time. Accordingly, there can be no assurance that the assessment is a reliable indicator of the actual impact of climate change on Statoil. Furthermore, Statoil's expectations is to significantly grow investments in New Energy Solutions (to 15-20% of CAPEX per year by 2030, representing an indicative range of USD 750-1500 million per year).	Statoil's business strategy, including emission reduction targets and significant growth ambitions within new energy solutions. We assess and monitor climate related risks, whether related to regulations, technological development, market changes or other factors. We also develop energy scenarios that inform our strategy and planning. To ensure that we take climate related risks into account, we stress test our project portfolio against the International Energy Agency (IEA) scenarios, including the low-carbon scenario. For investment analysis, we apply an internal carbon price of at least USD 50 per tonne to all projects. Furthermore, we	embedded as a strategic principle of Statoil's sharpened strategy. As such, climate implications are an integral part of how we do business and make investment decisions and not able to single out as a cost of management.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								require all potential projects and investments to be assessed for carbon intensity and emission reduction opportunities to sustain our industry leader position in carbon efficiency.	

CC5.1d

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

CC5.1e

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

CC5.1f

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

Further Information

Statoil's climate risk approach is described in the 2016 Sustainability Report, pages 16-18. Statoil's response to climate change risk and opportunities is described in the publication "Statoil's Climate Roadmap" (attachment). Note regarding disclosures: The stress test against the IEA energy scenarios is based on Statoil's and the IEA's assumptions which may not be accurate and which are likely to change over time. Accordingly, there can be no assurance that the assessment is a reliable indicator of the actual impact of climate change on Statoil.

Attachments

https://www.cdp.net/sites/2017/32/23132/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC5.ClimateChangeRisks/A4-climate-roadmap-digital.pdf
https://www.cdp.net/sites/2017/32/23132/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC5.ClimateChangeRisks/statoil-ceo-presentation-cmu-2017.pdf

Page: CC6. Climate Change Opportunities

CC6.1

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

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

CC6.1a

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Renewable energy regulation	Incentives for renewable energy production and renewable electricity generation targets in many jurisdictions (e.g. in the EU and UK) create opportunities for Statoil within offshore wind and other renewable energy sources. We expect our offshore wind portfolio to grow significantly over	Investment opportunities	1 to 3 years	Direct	Very likely	Medium-high	Statoil has indicated a CAPEX potential per year of around USD 500-750 million in renewables/new energy solutions in the period 2017-2020. Source: Statoil Capital Markets Update 2017; https://www.statoil.com/content/dam/statoil/documents/quarterly-reports/2016/q4-2016/statoil-ceo-presentation-cmu-2017.pdf See also "cost of management" regarding capex committed so far.	Our management method includes R&D activities, pilot projects and investments in projects through joint ventures. Statoil's business area "New Energy Solutions" manages investments in offshore wind projects (fixed and floating) and other new energy solutions. By the end of 2016,	During 2016 Statoil had a capital expenditure (capex) spending of approx. USD 500 million related to already sanctioned wind projects. In December 2016, Statoil won the federal lease sale for the New York Wind Energy Area with a winning bid of USD 42.5 million (100% Statoil owned). Expected CAPEX to

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the next few years. Our strategy indicates a growth within offshore wind from 500 million USD in CAPEX in 2016 to 750-1500 million USD annually invested in the years 2020-2025.							Statoil had two wind projects in operation: Hywind Demo (Norway), and Sheringham Shoal UK). Dudgeon (UK), Hywind Scotland (UK) and Arkona (Germany) are offshore wind projects under development. In December 2016, Statoil won the federal lease sale for the New York Wind Energy Area, and	new energy solutions going forward is described in "Estimated financial implications". Additionally, in 2016 Statoil spent around USD 18.7 million on R&D activities related to renewables and CCS.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Statoil is now gearing up development activity. See 2016 Sustainability Report page 22 for more information about our offshore wind projects. Additionally, through our Statoil Energy Venture Fund, we plan to invest around USD 200 million in new energy solutions over the next 4-7 years.	

CC6.1b

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management

CC6.1c

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Statoil's climate approach could strengthen the company's reputation, the attractiveness of the stock, as well as strengthen employee motivation and talent attraction. In a survey among 14000 students from 27 universities and colleges in Norway, Statoil was ranked as the most attractive employer among technology students. The study from April 2017 is described in this article (in Norwegian only): http://e24.no/spesial/universum-lister/studenter/?sector=ingenioerstudenter	Other:	1 to 3 years	Direct	More likely than not	Low-medium	Quantitative assessments are not available. We consider attracting and retaining talent as very important to remain competitive.	Statoil's Climate Roadmap has been extensively communicated to external and internal stakeholders, including presentations at several universitie	Training and engagement costs have been primarily in the form of man hours (200 employees x 2 hour training).

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								s relevant for recruitment. One example of such an activity was presentation of and discussions around Statoil's approach to climate change at the European Youth Parliament (EYP) in April 2017. This event gathered students from more than 20 European countries. Statoil's Climate Roadmap is actively used as training material	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								for new hires and as part of Statoil University courses. Around 200 employees attended Climate Roadmap trainings and workshops the first months after the launch of Statoil's Climate Roadmap in 2017.	
Other drivers	The Norwegian government is planning a large scale pilot project for offshore storage of CO2 from land-based industry. This can potentially open up business opportunities for Statoil within offshore storage of CO2. In a study in 2016 Statoil confirmed the feasibility of offshore carbon storage on the Norwegian continental shelf. This can pave the way for	New products/business services	>6 years	Direct	More likely than not	Medium-high	According to the Norwegian Ministry of Petroleum and Energy, the cost for planning and investment for the whole chain (carbon capture and storage) for this specific proejct is estimated at between NOK 7.2 and 12.6 billion (excluding VAT). The cost estimates are based on the reports from the industrial players and have an uncertainty of up to 40 percent.	Our management method includes R&D, pilot projects and a feasibility study . Statoil has long been	In 2016, Statoil spent around USD 18.7 million on R&D activities within renewables and CCS. See

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	realisation of the first projects in Europe of this kind. Source: https://www.regjeringen.no/en/aktuelt/good-potential-for-succeeding-with-ccs-in-norway/id2506973/						The Norwegian Government will present further plans for CCS in the state budget for 2017. Source: https://www.regjeringen.no/en/aktuelt/good-potential-for-succeeding-with-ccs-in-norway/id2506973/	a pioneer in CCUS, and we are currently operating some of the largest carbon storage projects worldwide. This has demonstrated the technical viability of CCS. In 2016, Statoil participated in a Norwegian government-led study that confirmed the feasibility of offshore carbon storage on the Norwegian continental shelf.	also "Estimated financial implications".

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								The next phase is a front end engineering and design study for CO2 storage. Statoil has delivered an offer as part of a tender process.	

CC6.1d

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

CC6.1e

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

We have not identified significant business opportunities driven by physical climate change. This is because we do not consider physical climate changes to significantly drive oil and gas demand/prices, nor have significant impact on our reserves or costs of operations, including supply side costs. This conclusion is based on an assessment of the company's exposure to changes in physical parameters, expressed as a combination of geographical presence (region/country) and associated likely physical impacts as outlined in scientific reports (IPCC AR5 Report), the type of business activity (mainly offshore oil and gas production and offshore wind projects) and the time frame for expected changes in physical parameters in various regions. Based on a combination of exposure and timing of physical parameters, and the nature of drivers of risks and opportunities for Statoil, we do not see material business opportunities neither for oil and gas production nor new energy solutions specifically arising from physical climate change.

CC6.1f

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

Further Information

It should be noted that forward looking statements are subject to significant uncertainties and may not give an accurate description of risks and opportunities. Sources of information: R&D expenses to renewables and CCS are disclosed in our Sustainability report, page 23. Norwegian government led CCS project: https://www.regjeringen.no/en/aktuelt/good-potential-for-succeeding-with-ccs-in-norway/id2506973/ Statoil Capital Markets Update 2017: https://www.statoil.com/content/dam/statoil/documents/quarterly-reports/2016/q4-2016/statoil-ceo-presentation-cmu-2017.pdf

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

Page: CC7. Emissions Methodology

CC7.1

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

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Mon 01 Jan 2007 - Mon 31 Dec 2007	15222876
Scope 2 (location-based)	Mon 01 Jan 2007 - Mon 31 Dec 2007	106674
Scope 2 (market-based)	Mon 01 Jan 2007 - Mon 31 Dec 2007	1687512

CC7.2

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

Please select the published methodologies that you use
IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011
US EPA Mandatory Greenhouse Gas Reporting Rule
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
ISO 14064-1
Canadian Association of Petroleum Producers, Calculating Greenhouse Gas Emissions, 2003
American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009
Energy Information Administration 1605B
Other

CC7.2a

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

- Norwegian Oil and Gas Association - 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 6976:1995 "Natural gas - Calculation of heating values, density, relative density and Wobbe - index from composition"
- US EPA Technology Transfer Network Clearinghouse for Inventories and Emissions Factors, Emisson Factors and AP42, Fifth Edition
- European Commission (EC) Eurostat: EC Statistics

2006 IPCC Guidelines for Natural Greenhouse Gas Inventories
- US Energy Information Administration
- eGRID Web (Emissions and Generation Resource Integrated Database)
- RE-DISS Reliable Disclosure Systems for Europe Country profiles

CC7.3

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

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

CC7.4

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

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: Liquid	3.17	metric tonnes CO2 per metric tonne	Norwegian Climate and Pollution Agency
Natural gas	2.8	metric tonnes CO2 per metric tonne	Norwegian Climate and Pollution Agency
Electricity	10	kg CO2 per MWh	Norway: IEA Statistics. CO2 Emissions from fuel combustion (2015 Edition)
Electricity	820	kg CO2 per MWh	Canada: 2015 Canada National Inventory Report (1990-2012)
Electricity	827	kg CO2 per MWh	US onshore (Bakken): REF: EPA United States Environmental Protection Agency
Electricity	471	kg CO2 per MWh	Germany: IEA Statistics. CO2 Emissions from fuel combustion (2014 Edition)
Electricity	1040	kg CO2 per MWh	Bahamas
Electricity	189	kg CO2 per MWh	Denmark

Further Information

Our Scope 1 emissions are calculated on a site by site basis, and the emissions factors used are often governed by local regulations. While some sites may use standard factors from published guidelines, others use fuel composition and flow rates in a daily/monthly basis to calculate their emissions. Some of our refinery operations use continuous flue gas flow rates and stack measurements for their calculations. The diversity in methodologies, units, accuracies and calculation frequencies makes it impractical (and uneconomic) to present our emission factors on a corporate level. The emission factors in the table above are used for our location based Scope 2 calculations and scope 3 calculations. Base year calculations: Base year (2007) emissions factors for market based Scope 2 calculations are not available, so 2014 RE-DISS factors have been applied for these calculations. Market-based Scope 2 calculations also accommodate methodology changes since 2007.

Page: CC8. Emissions Data - (1 Jan 2016 - 31 Dec 2016)

CC8.1

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

Operational control

CC8.2

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

15407140

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We are reporting a Scope 2, market-based figure	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 RE-DISS residual mix factors (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.

CC8.3a

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

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
322164	2551625	

CC8.4

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

Yes

CC8.4a

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

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
Scope 2 CH4 from all operations	Emissions are not relevant	Emissions are not relevant	Emissions are not relevant	CH4 emissions from imported energy are not easily available.

CC8.5

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

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Assumptions	There is monthly internal reporting of data and follow-up on trend and variances on a corporate level. Most of the CO2 reported for Norway and Canada is based on data from continuous sampling and metering (CEMS) which is imported into our environmental accounting system. These calculations are considered to have a higher level of accuracy. Other data are based on a lower-tier approach using standard factors from published or local regulatory guidelines. Data accuracy will vary across the company, but an overall uncertainty higher than 5 % is not expected. Our Scope 1 CO2 emissions are externally verified.
Scope 2 (location-based)	More than 2% but less than or equal to 5%	Assumptions	Data accuracy will vary across the company, but an overall uncertainty higher than 5 % is not expected. Our Scope 2 CO2 emissions are externally verified.
Scope 2 (market-based)	More than 2% but less than or equal to 5%	Assumptions	Data accuracy will vary across the company, but an overall uncertainty higher than 5 % is not expected. Our Scope 2 CO2 emissions are externally verified.

CC8.6

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

Third party verification or assurance process in place

CC8.6a

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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/32/23132/Climate Change 2017/Shared Documents/Attachments/CC8.6a/sustainability-report-2016.pdf	Independent assurance report Page 57-58	ISAE3000	100

CC8.6b

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

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

CC8.7

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

Third party verification or assurance process in place

CC8.7a

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

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/32/23132/Climate Change 2017/Shared Documents/Attachments/CC8.7a/sustainability-report-2016.pdf	Independent assurance report Page 57-58	ISAE3000	100
Market-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/32/23132/Climate Change 2017/Shared Documents/Attachments/CC8.7a/sustainability-report-2016.pdf	Independent assurance report Page 57-58	ISAE3000	100

CC8.8

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

Additional data points verified	Comment
Year on year emissions intensity figure	Intensity figures are published in our annual sustainability report, externally verified.
Year on year change in emissions (Scope 3)	Our Scope 3 emissions are published in our annual sustainability report, externally verified.
Other: Hydrocarbon flared	Externally verified
Emissions reduction activities	Externally verified

CC8.9

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

No

CC8.9a

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

Further Information

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

CC9.1

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

Yes

CC9.1a

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

Country/Region	Scope 1 metric tonnes CO2e
Norway	13345897
Brazil	438947

Country/Region	Scope 1 metric tonnes CO2e
Canada	491539
Germany	11125
United Kingdom	112
United States of America	636319
Denmark	483202

CC9.2

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

By business division
By GHG type

CC9.2a

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

Business division	Scope 1 emissions (metric tonnes CO2e)
DPUSA	626111
CFO GBS	68
DPI	908161
DPN	8516179
MMP	5317875
EXP	38634

Business division	Scope 1 emissions (metric tonnes CO2e)
NES	112

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude

CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	14802856
CH4	604284

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)

Further Information

Statoil reports GHG emissions for assets where we have operational control, aligned with the industry reporting practice (7 countries).

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC10.1

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

Yes

CC10.1a

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

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Norway	34849	2208982	4742876	417000
Denmark	64281	118787	374593	0
United States of America	148089	148089	179943	0

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Canada	71627	71627	210584	0
Bahamas	1892	1892	2825	0
Germany	1425	2248	4313	0

CC10.2

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

By business division

CC10.2a

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

Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
DPN	6339	403298
MMP	95132	1874706
CFO GBS	808	44907
TPD	17	1089
NES	152	7908
DPUSA	148089	148089

Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
DPI	71627	71627

CC10.2b

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

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

CC10.2c

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

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

Further Information

Page: CC11. Energy

CC11.1

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

More than 0% but less than or equal to 5%

CC11.2

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

Energy type	MWh
Heat	228462
Steam	0
Cooling	400

CC11.3

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

61079746

CC11.3a

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

Fuels	MWh
Butane	124780
Coke oven coke	2514619
Other: CoLGO	13001
Diesel/Gas oil	3313083
Natural gas	45526062
Other: Fuel Oil	254
Other: LOFS	3785
Other: Not assigned	521370
Propane	20
Other: Purge gas	415039
Refinery gas	8565120
Other: Spill gas	82614

CC11.4

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

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Other	417000	0.008	The stated emission factor is based on CO2 and not CO2e. The MWh figure provided here represents 8,8% of the total MWh consumption in Norway that is subject to the El Certificate obligation. In Norway we buy El Certificates due to the quota obligation set by Norwegian Energy Authorities each year. For 2015 the quota obligation was 8,8% of electricity consumption in Norway. This means that we purchased elcertificates for 8,8% of our electricity consumption in Norway. From January 1st 2012 Norway and Sweden have had a common market for elcertificates. An elcertificate is an electronic document granted to producers of new renewable

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
			electricity for each MWh they produce. Most consumers with some defined exceptions are obliged to buy a specific amount of elcertificates each year. Until 2020, Norway and Sweden intend to expand their electricity production based on renewable energy sources by 26.4 TWh. New built renewable power plants are entitled to elcertificates following certain criteria and approval by The Norwegian Water Resources and Energy Directorate (NVE). Power consumers, with some defined exception, are obliged to cover a certain amount of their consumption with elcertificates (quota obliged consumption). For most consumers the suppliers handle the elcertificates obligation. The quota increases gradually until 2020. The system is scheduled to be phased out in 2035. The marked based CO2 emissions reported in CC8.7 do not take the low carbon energy in CC11.4 into account, as the elcertificate system is not part of a Guarantees of Origin (GoO) trading scheme.

CC11.5

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

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
5286273	5286273	751379	4806	0	A significant increase in total renewable electricity produced is expected in next year's report as Statoil takes over the operatorship of Sheringham Shoal wind farm (UK) on April 1st 2017.

Further Information

Page: CC12. Emissions Performance

CC12.1

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

Decreased

CC12.1a

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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	2.0	Decrease	Last year 0.3 million tonnes CO2eq were reduced by our emissions reduction projects. Statoil`s total Scope 1 and Scope 2 emissions in 2015 were 16 616 072 tonnes CO2eq. The percentage decrease is therefore (334 451/16 616 072)*100= 2.01%. The largest contributor to the decrease is reduced flaring volumes due to continued infrastructure improvements in our US Onshore operations.
Divestment			
Acquisitions	0.4	Increase	Changes in acquisitions contributed to an increase of 67070 tonnes CO2 eq. Statoil`s total Scope 1 and Scope 2 emissions in 2015 were 16 616 072 tonnes CO2eq. The percentage decrease is therefore (67070/16 616 072)*100= 0.40%. The increase is mainly due to the addition of new assets into US Onshore portfolio".
Mergers			
Change in output	0.7	Increase	Last year, changes in output contributed to an increase of 114 145 tonnes CO2eq. Statoil`s total Scope 1 and Scope 2 emissions in 2015 were 16 616 072 tonnes CO2eq. The percentage increase is therefore (114 145/16 616 072)*100= 0,69%. The change in output related emissions is relatively small. There are some new fields ramping up production but the output effect of the turnaround (allocated to operational disruptions) have a far greater impact.
Change in methodology	1.8	Decrease	Changes in methodologies contributed to an decrease of 300 858 tonnes CO2eq in 2016. Statoil`s total Scope 1 and Scope 2 emissions in 2015 were 16 616 072 tonnes CO2eq. The percentage decrease is

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
			therefore (300 858/16 616 072)*100=1.81%. The Norwegian Environment Agency introduced new emissions factors for fugitives calculations in 2016, which has caused a decrease in overall CH4 emissions (expressed as CO2e) compared to 2015. Furthermore, updated measurements in the refinery and processing segment have also made some contributions towards the decrease.
Change in boundary			
Change in physical operating conditions	2.5	Decrease	Changes in physical operating conditions led to a decrease of 410 860 tonnes CO2eq in 2016. Statoil`s total Scope 1 and Scope 2 emissions in 2015 were 16 616 072 tonnes CO2eq. The percentage decrease is therefore (410 860/16 616 072)*100= 2,47%. The main driver for this decrease is several turnarounds that occurred in 2016, particularly in the Norwegian Continental Shelf, which have caused a decrease in emissions from 2015 to 2016.
Unidentified			
Other	0.1	Decrease	Last year, changes in emissions allocated to the category "Other" decreased by 15 814 tonnes CO2eq. Statoil`s total Scope 1 and Scope 2 emissions in 2015 were 16 616 072 tonnes CO2eq. The percentage decrease is therefore (15 814/16 616 072)*100= 0.10%. The "other" category includes emissions related to drilling and exploration activities, which decreased in 2016 compared to 2015.

CC12.1b

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

Location-based

CC12.2

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

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.34	metric tonnes CO2e	45873000	Location-based	23	Increase	There has been a decrease in scope 1 and 2 emissions in 2016 compared to 2015, from 16.6 mill tonnes CO2 eq to 15.7 mill tonnes CO2 eq. Total revenues and other income has a decrease from 59,642 mill USD in 2015 to 45,873 mill USD in 2016. Please note that 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 guideline. Source: https://www.statoil.com/content/dam/statoil/documents/annual-reports/2016/statoil-2016-annual-report.pdf

CC12.3

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

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
10.4	metric tonnes CO2e	Other: mboe	989233	Location-based	0.3	Decrease	The scope of this intensity is limited to the upstream segment. The main driver for the change is a decrease in upstream CO2 emissions. The decrease in emissions are mainly attributed to emissions reduction projects. The largest contributor in that respect is our US asset Bakken (see section 12.1 a for details). FYI: Starting 2015, our LNG facilities (and associated CO2 and

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
							upstream production volumes) has organizationally moved from the upstream to the midstream segment, and does no longer contribute to this intensity.

Further Information

In 2016 Statoil changed its presentation currency from Norwegian kroner (NOK) to US dollar (USD), mainly in order to better reflect the underlying USD exposure of Statoil's business activities and to align with industry practice. Comparative figures have been represented in USD to reflect the change. Figures for 2016 are presented using the Central Bank of Norway's year end rates for Norwegian kroner. In 2016 total revenues and other income was 45.9 million USD.

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

Yes

CC13.1a

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

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union ETS	Fri 01 Jan 2016 - Sat 31 Dec 2016	6542238	5464000	12143714	Facilities we own and operate
Other:	Fri 01 Jan 2016 - Sat 31 Dec 2016	0	0	2659142	Facilities we own and operate

CC13.1b

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

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. Statoil operates facilities which are subject to Norwegian and European climate legislation. The company must each year submit quotas corresponding to the entire (oil and gas production on the Norwegian and UK continental shelf) or parts (other activities) of its carbon emissions. Emission allowances are purchased in the market to meet these compliance obligations. The emission trading group is responsible for compliance related CO2 trading for all Statoil operated licenses. New for 2016 is Statoil's emission exposure for Mariner on the UK Continental Shelf.

Statoil has been active in the carbon market since 2005, and was the first company to execute European Carbon Allowances (EUAs) (2005) and Certified Emission Reduction (CERs) (2007) on the first carbon exchange in the world. In addition to EUAs Statoil is using CERs, generated by Clean Development Mechanism (CDM) projects, for compliance purposes. Statoil supports the developments of new emission trading schemes in different part of the world. We recognize it as the most cost-efficient way to cut emissions. Allowances purchased are subject to third party verification.

The difference between EU-ETS related emissions and the total Statoil emissions, according to Statoil's sustainability report is reported as "other" in the table above. This is mainly related to US operations.

CC13.2

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

Yes

CC13.2a

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

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
Credit purchase	Other: Prototype Carbon Fund	PCF #205	CDM (Clean Development Mechanism)	12097	12097	Not relevant	Voluntary Offsetting
Credit purchase	Other: Community Development Carbon Fund (CDCF)	CDCF #160	CDM (Clean Development Mechanism)	15157	15157	Not relevant	Voluntary Offsetting

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.
Capital goods	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.
Upstream transportation and distribution	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.
Waste generated in operations	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.
Business travel	Relevant, calculated	51706	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	100.00%	Based on the "Carbon Report" from our business travel provider "HRG Consulting" for domestic, continental and intercontinental travel in 2016.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Employee commuting	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.
Upstream leased assets	Not relevant, explanation provided				No upstream leased assets.
Downstream transportation and distribution	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.
Processing of sold products	Not relevant, explanation provided				Our own processing of sold products is included in scope 1 and 2. The rest of oil and gas products are sold worldwide, making it impossible to analyze the processing of our products.
Use of sold products	Relevant, calculated	296000000	Based on gas and liquids sold and applying emission factors based on Norwegian Environment Agency (NEA) guidelines.	100.00%	Based on gas and liquids sold and applying emission factors based on Norwegian Environment Agency (NEA) guidelines.
End of life treatment of sold products	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions. It is assumed

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					that all sold products are burnt or oxidized; therefore, no end-of life treatment of sold products is needed.
Downstream leased assets	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.
Franchises	Not relevant, explanation provided				Not applicable to our operations.
Investments	Not relevant, explanation provided				Not applicable to our operations.
Other (upstream)	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.
Other (downstream)	Not relevant, explanation provided				Assumed to be insignificant compared to the total of Scope 3 emissions.

CC14.2

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

Third party verification or assurance process in place

CC14.2a

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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/32/23132/Climate Change 2017/Shared Documents/Attachments/CC14.2a/sustainability-report-2016.pdf	Independent assurance report Page 57-58	ISAE3000	100

CC14.3

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

Yes

CC14.3a

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

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Use of sold products	Change in output	0	No change	The Scope 3 emissions are calculated for category 11 - use of sold products. Our equity production increased from 1971 mboe/day to 1974 mboe/day in 2016, increasing our Scope 3 emissions from 295 million tones of CO2e in 2015 to 296 million tones of CO2e in 2016. We regard this as a stable scope 3 emission.
Business travel	Emissions reduction activities	2.3	Decrease	Business travel in Statoil was reduced by 2,3% from 2015 to 2016. This is mainly an effect of encouragement for our employees to consider use of video meetings for all meetings they participate in.

CC14.4

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

Yes, our suppliers
Yes, our customers
Yes, other partners in the value chain

CC14.4a

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

The annual value of our procurement spend is over USD 18 billion, and we have approximately 9,400 suppliers around the world. We are committed to working with suppliers that maintain high standards of sustainability performance.

Statoil´s main priority within the supply chain is working with emission reduction in shipping and transport of oil and gas products, as this is the most significant source of emissions in our supply chain. Working together with long-term suppliers, we can incentivize emission reductions through technology and fuel efficiency improvements within these areas:

- Battery technology (installing battery systems onboard allows vessel to run on fewer fossil generators).
- Conversion to LED lights.

- Onshore power supply.
- Propel polishing and hull cleaning.
- Allowing for "green speed".
- Optimal trim study.

In 2017 Statoil will engage 35-50 supply-, anchor handler- and standby vessels in Norway. CO2 emissions from these vessels were reduced by 28% from 2011 to 2016, adjusted for activity level.

We discuss performance in regular meetings with suppliers. In addition we monitor fuel consumption and benchmarking results against other ship owners. We use supplier contracts that financially reward suppliers that are able to reduce fuel consumption.

Success is measured through several parameters such as actual delivery of expected service, number of serious personal injuries related to the vessel, fuel consumption (directly paid by Statoil) and overall emissions from the vessel activity. Other benefits such as lower noise levels and NOx emissions from a vessel with shore power connection, while at shore, may also be taken into consideration.

Statoil has meetings every quarter with licence partners. These meetings include discussions about larger investments for emission reducing measures.

CC14.4b

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

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Active engagement	25	50%	The actual CO2 emissions from our marine vessel activities decreased from 2015 to 2016, both in absolute numbers and also adjusted for activity level.

CC14.4c

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

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

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

Name	Job title	Corresponding job category
John Knight	Executive Vice President, Global Strategy & Business Development.	Other C-Suite Officer

Further Information

Module: Oil & Gas

Page: OG0. Reference information

OG0.1

Please identify the significant petroleum industry components of your business within your reporting boundary (select all that apply)

Exploration, production & gas processing
Storage, transportation & distribution
Refining

Further Information

Statoil sold off Fuel and Retail in 2012.

Page: OG1. Production, reserves and sales by hydrocarbon type - (1 Jan 2016 - 31 Dec 2016)

OG1.1

Is your organization involved with oil & gas production or reserves?

Yes

OG1.2

Please provide values for annual gross and net production by hydrocarbon type (in units of BOE) for the reporting year in the following table. The values required are aggregate values for the reporting organization

Product	Gross production (BOE)	Net production (BOE)	Production consolidation boundary	Comment
Heavy oil	64379966	28920192	Equity share	
Bitumen (oil sands)	7473762	7473762	Equity share	
Shale gas Tight gas Shale oil Tight oil	216208048	56732501	Equity share	
Extraheavy oil	38796560	3755507	Equity share	
Liquefied Natural Gas (LNG)	47188861	17360782	Equity share	
Conventional non-associated natural gas Light oil Medium oil	2260051968	606711159	Equity share	

OG1.3

Please provide values for reserves by hydrocarbon type (in units of BOE) for the reporting year. Please indicate if the figures are for reserves that are proved, probable or both proved and probable. The values required are aggregate values for the reporting organization

Product	Country/region	Reserves (BOE)	Date of assessment	Proved/Probable/Proved+Probable
Natural gas condensate Light oil Medium oil Heavy oil	Norway	1232000000	Sat 31 Dec 2016	Proved
Natural gas liquids (NGL)	Norway	289000000	Sat 31 Dec 2016	Proved
Natural gas liquids (NGL)	Africa	16000000	Sat 31 Dec 2016	Proved
Natural gas liquids (NGL)	Americas	67000000	Sat 31 Dec 2016	Proved
Conventional non-associated natural gas Associated natural gas	Norway	2290000000	Sat 31 Dec 2016	Proved
Conventional non-associated natural gas Associated natural gas	Eurasia	33000000	Sat 31 Dec 2016	Proved
Conventional non-associated natural gas Associated natural gas	Africa	50000000	Sat 31 Dec 2016	Proved
Conventional non-associated natural gas Associated natural gas Shale gas Synthetic gas	Americas	234000000	Sat 31 Dec 2016	Proved

Product	Country/region	Reserves (BOE)	Date of assessment	Proved/Probable/Proved+Probable
Tight gas				
Natural gas condensate Light oil Medium oil	Eurasia	71000000	Sat 31 Dec 2016	Proved
Natural gas condensate Light oil Medium oil	Africa	221000000	Sat 31 Dec 2016	Proved
Natural gas condensate Light oil Medium oil Heavy oil Extraheavy oil Bitumen (oil sands) Shale oil Synthetic oil Tight oil	Americas	510000000	Sat 31 Dec 2016	Proved

OG1.4

Please explain which listing requirements or other methodologies you have used to provide reserves data in OG1.3. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries, please explain this

Statoil's oil and gas reserves have been estimated by its qualified professionals in accordance with industry standards under the requirements of the U.S. Securities and Exchange Commission (SEC), Rule 4-10 of Regulation S-X.
Rule 4-10 of Regulation S-X requires that the appraisal of reserves is based on existing economic conditions, including a 12-month average price prior to the end of the reporting period, unless prices are defined by contractual arrangements.

OG1.5

Please provide values for annual sales of hydrocarbon types (in units of BOE) for the reporting year in the following table. The values required are aggregate values for the reporting organization

Product	Sales (BOE)	Comment
Heavy oil	28920192	
Extraheavy oil	11229269	Including bitumen.
Liquefied Natural Gas (LNG)	17360782	
Tight oil	28386601	US onshore liquids.
Shale gas	28345900	US onshore gas.
Other: Conventional Oil & Gas	606711159	

OG1.6

Please provide the average breakeven cost of current production used in estimation of proven reserves

Hydrocarbon/project	Breakeven cost/BOE	Comment
Next generation portfolio of projects (those sanctioned since 2015 or planned for sanction with start up by 2022).	27	By reworking solutions from reservoir to market, we have transformed our opportunity set. The break-even price for our ‘next generation’ portfolio of projects (those sanctioned since 2015 or planned for sanction with start up by 2022), is now at USD 27 per barrel of oil equivalent (boe).

OG1.7

In your economic assessment of hydrocarbon reserves, resources or assets, do you conduct scenario analysis and/or portfolio stress testing consistent with a low-carbon energy transition?

Yes, compatible with IEA 450

OG1.7a

Please describe your scenario analysis and/or portfolio stress testing, the inputs used and the implications for your capital expenditure plans and investment decisions

To ensure that we take relevant risk factors into account, we apply tools such as internal carbon pricing, scenario planning and stress testing of projects against various oil and gas price assumptions. In 2016, we made further steps to systematically incorporate climate aspects in all investment decisions.

In 2015, responding to a shareholder request, we started to stress test our project portfolio against IEA energy scenarios. In our 2016 analysis, we replaced our own planning assumptions for future oil, gas and carbon prices with the equivalent assumptions in the IEA 450 scenario incorporated in the World Energy Outlook 2016. The analysis covers all accessed acreage, from exploration licences to fields in production, over the lifetime of the projects. Both our own and IEA's price assumptions may differ from actual future oil, gas and carbon prices, so there can be no assurance that the assessment is a reliable indicator of the actual impact of climate change on Statoil. According to the stress test, the IEA's 450 scenario would have a positive impact of about 6 % on Statoil's net present value (NPV), compared to our own planning assumptions as of December 2016. Different assumptions about oil and gas prices are the main contributor to changes in NPV, rather than carbon price.

The stress test demonstrates that our portfolio is resilient to the IEA's energy scenarios, aligned with our strategic focus on lower carbon, high value projects.

OG1.7b

Please explain why you have not conducted any scenario analysis and/or portfolio stress testing consistent with a low-carbon energy transition

Further Information

Page: OG2. Emissions by segment in the O&G value chain - (1 Jan 2016 - 31 Dec 2016)

OG2.1

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

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

OG2.2

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

Consolidation basis is the same for all categories.

OG2.3

Please provide masses of gross Scope 1 carbon dioxide and methane emissions in units of metric tonnes CO2 and CH4, respectively, for the organization's owned/controlled operations broken down by value chain segment

Segment	Gross Scope 1 carbon dioxide emissions (metric tonnes CO2)	Gross Scope 1 methane emissions (metric tonnes CH4)
Exploration, production & gas processing	9777257	12473
Storage, transportation & distribution	4030	320
Refining	5021389	11378

OG2.4

Please provide masses of gross Scope 2 GHG emissions in units of metric tonnes CO2e for the organization's owned/controlled operations broken down by value chain segment

Segment	Gross Scope 2 emissions (metric tonnes CO2e)	Comment
Exploration, production & gas processing	226055	Based on the location based scope 2 method.
Storage, transportation & distribution	3317	Based on the location based scope 2 method.
Refining	91815	Based on the location based scope 2 method.

Further Information

Exploration, Production & Gas Processing excludes gas Processing terminal/facilities, and includes only gas Processing in site/platform. Gas Processing in terminal/facilities like Sture and Kårstø in Norway are included in Refining figures. Storage, transportation and distribution includes South Riding Point (Bahamas) and Statoil Deutschland Storage GmbH. Emissions from research facilities, office buildings and Statoils business asset "new energy solutions" are not included in any of these O&G segments.

Page: OG3. Scope 1 emissions by emissions category - (1 Jan 2016 - 31 Dec 2016)

OG3.1

Please confirm the consolidation basis (financial control, operational control, equity share) used to report Scope 1 emissions by emissions category

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

OG3.2

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

Consolidation basis is the same for all categories.

OG3.3

Please provide masses of gross Scope 1 carbon dioxide and methane emissions released into the atmosphere in units of metric tonnes CO2 and CH4, respectively, for the whole organization broken down by emissions category

Emissions category	Gross Scope 1 carbon dioxide emissions (metric tonnes CO2)	Gross Scope 1 methane emissions (metric tonnes CH4)
Combustion	12557526	3093
Flaring	1364315	1148
Process emissions	880835	9
Vented emissions		
Fugitive emissions		19921

OG3.4

Please describe your organization's efforts to reduce flaring, including any flaring reduction targets set and/or its involvement in voluntary flaring reduction programs, if flaring is relevant to your operations

In 2012, as part of our commitment to the UN Sustainable Energy for All initiative, we announced a 2020 flaring intensity target of 2 tonnes of gas flared per 1,000 tonnes of hydrocarbons produced. We expect to meet this target. Through our collaboration with the Global Gas Flaring Reduction Partnership, we have set an additional target of bringing down routine flaring to zero by 2030. At Bakken, USA, we have significantly reduced our flaring level over the past few years. We are working together with neighbouring partners and technology providers to develop flaring reduction solutions. We are required to coordinate our drilling operations with pipeline construction, to reduce the need for flaring. In 2015, we reduced our flaring volumes at Bakken by more than 40% compared to 2014, reaching a flaring level below 10% of produced gas in the last quarter of 2015. We thereby surpassed the state of North Dakota's established target to reduce flaring to less than 10% of produced gas by 2020.

Further Information

Page: OG4. Transfers & sequestration of CO2 emissions - (1 Jan 2016 - 31 Dec 2016)

OG4.1

Is your organization involved in the transfer or sequestration of CO2?

Yes

OG4.2

Please indicate the consolidation basis (financial control, operational control, equity share) used to report transfers and sequestration of CO2 emissions

Activity	Consolidation basis
Transfers	Operational Control
Sequestration of CO2 emissions	Operational Control

OG4.3

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

Consolidation basis is the same for both Snøhvit and Sleipner.

OG4.4

Using the units of metric tonnes of CO2, please provide gross masses of CO2 transferred in and out of the reporting organization (as defined by the consolidation basis). Please note that questions of ownership of the CO2 are addressed in OG4.6

Transfer direction	CO2 transferred – Reporting year
CO2 transferred in	0
CO2 transferred out	0

OG4.5

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

Capture of CO2 from Sleipner gas and storage of 672895 tons in 2016 into saline Utsira formation under the seabed of Sleipner. Utsira formation is used by other entities for disposal/storage.

Capture of CO2 from Snøhvit gas and storage of 680787 tons in 2016 into Stø formation under the seabed offshore Snøhvit. Stø formation is not used by other entities for disposal/storage.

OG4.6

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

No transferred emissions. All emissions captured are our own emissions and Statoil is responsible for the storage.

OG4.7

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

Capture pathway in CCS	Captured CO2 (metric tonnes CO2)	Percentage transferred in	Percentage transferred out
Gas stream separation from natural gas purification	672895	0%	0%
Gas stream separation from natural gas purification	680787	0%	0%

OG4.8

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

Injection and storage pathway	Injected CO2 (metric tonnes CO2)	Percentage of injected CO2 intended for long-term (>100 year) storage	Year in which injection began	Cumulative CO2 injected and stored (metric tonnes CO2)
CO2 injected into a geological formation or saline formation for long-term storage	672895	100%	1996	16629606
CO2 injected into a geological formation or saline formation for long-term storage	680787	100%	2008	4252445

OG4.9

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

At Snøhvit, a separate pipeline transports the CO2 from the Hammerfest LNG plant back to the Snøhvit field. Until March 2011 the gas was injected and stored in the Tubåen formation while it later has been injected into the Stø formation. This structure lies under the layers in Snøhvit containing gas. The well performance is continuously monitored by both pressure development in the well and analytical method like a Fall-Off test. In addition, 2D seismic surveys was acquired in order to establish a 2D-4D reference for further monitoring. A 3D/4D seismic monitoring survey are as well acquired for monitor CO2 movement in the Stø and Tubåen formations. CO2 storage and monitoring is reported yearly to Norwegian authorities (Norwegian Environment Agency) as well as National Inventory Report (NIR).

Further Information

Page: OG5. Emissions intensity - (1 Jan 2016 - 31 Dec 2016)

OG5.1

Please provide estimated emissions intensities (Scope 1 + Scope 2) associated with current production and operations

Year ending	Segment	Hydrocarbon/product	Emissions intensity (metric tonnes CO2e per thousand BOE)	% change from previous year	Direction of change from previous year	Reason for change
2015	Exploration, production & gas processing	Heavy oil	17.64	7.8	Increase	The CO2 intensity of the Heavy Oil segment has increased from 16,37 tonnes CO2e per mBOE in 2014 to 17,64 tonnes CO2e per mBOE in 2015. The production has decreased since 2014, mainly due to operational disruptions in the form of emergency shut-downs. At the same time, CO2 emissions has increased, causing a negative development of the CO2 intensity.The CO2 increase is due to an increased energy demand linked to both new wells in stream and also managing larger produced water volumes as a consequence of a maturing field. CO2 emissions reduction projects in this segment in 2015 are too small to have any significant influence on the development of the intensity figure.
2015	Exploration, production & gas processing	Extraheavy oil	76.12	3.2	Decrease	The CO2 intensity of the Extra Heavy Oil segment decreased from 78,62 tonnes CO2e per mBOE in 2014 to 76,12 tonnes CO2e per mBOE in 2015. The main reason for the variance in both CO2 and production is new wells on stream. The new wells have increased the production rate, and at the same time also created a higher steam demand – and consequently more CO2. The decrease in CO2 intensity is attributed to the infill wells which came on stream in 2015. Infill wells are accessing high quality bitumen between existing well pairs, thus lowering the stem-to-oil ratio and the CO2 intensity.

Year ending	Segment	Hydrocarbon/product	Emissions intensity (metric tonnes CO2e per thousand BOE)	% change from previous year	Direction of change from previous year	Reason for change
2015	Refining	Liquefied Natural Gas (LNG)	23.31	10.7	Decrease	The CO2 intensity of the Liquefied Natural gas segment has decreased from 26,10 tonnes CO2e per mBOE in 2015 to 23,31 tonnes CO2e per mBOE in 2014.
2015	Exploration, production & gas processing	Tight oil	26.45	39.4	Decrease	The CO2 intensity of the Tight Oil segment has decreased significantly from 43,65 tonnes CO2e per mBOE in 2014 to 26,45 tonnes CO2e per mBOE in 2015. The root cause for the positive development in the CO2 intensity is the continuing efforts to reduce production flaring by establishing produced gas infrastructure at Statoil's US Bakken asset.
2015	Exploration, production & gas processing	Shale gas	5.96	25.5	Decrease	The CO2 intensity of the Shale Gas segment has decreased, from 5,96 tonnes CO2e per mBOE in 2014 to 8,01 tonnes CO2e per mBOE in 2015. The shale gas segment has experienced both increased production and a decrease in CO2 in 2015. The decrease in CO2 is a consequence of less drilling activity and less diesel consumption compared to 2014. At the same time, the wells drilled in 2014 are experiencing increased production rates. Production rates for wells in the shale gas segment typically increase for the first 18-36 months of production.
2015	Exploration, production & gas processing	Conventional non-associated natural gas	9.32	6	Decrease	This is the emission intensity for Conventional Oil & Gas. The Conventional Oil &Gas segment is not available as a choice in the drop down list. The CO2 intensity of Conventional O&G segment has decreased from 9.92 tonnes CO2e per mBOE in 2014 to 9.32 tonnes CO2e per mBOE in 2015. There has been an increase in production levels since 2014, mainly due to contributions from 2 new assets on stream. However, the CO2 levels are more or less the same as in 2014. This can be attributed to energy efficiency measures which have been implemented in DPN throughout 2015. About 80 000 tonnes of CO2 saved has been reported trough the CO2 emission reduction KPI for 2015. But the total picture concerning avoided CO2 is even greater as several new projects using energy efficient technology has been implemented in this

Year ending	Segment	Hydrocarbon/product	Emissions intensity (metric tonnes CO2e per thousand BOE)	% change from previous year	Direction of change from previous year	Reason for change
						segment in 2015. These projects have a positive impact on the CO2 intensity
2016	Exploration, production & gas processing	Conventional non-associated natural gas	9.26	0.71	Decrease	The CO2 intensity of Conventional O&G segment has a slight decrease from 9.32 tonnes CO2e per mBOE in 2015 to 9.26 tonnes CO2e per mBOE in 2016. This is mainly due to turnaround shutdown at several facilities.
2016	Refining	Liquefied Natural Gas (LNG)	23.51	0.86	Increase	The CO2 intensity of the Liquefied Natural gas segment has increased from 23.31 tonnes CO2e per mBOE in 2015 to 23.51 tonnes CO2e per mBOE in 2016. The increase is mainly due to technical issues at two facilities leading to higher flare levels in 2016 compared to 2015.
2016	Exploration, production & gas processing	Heavy oil	19.19	8.73	Increase	The CO2 intensity of the Heavy Oil segment has increased from 17.64 tonnes CO2e per mBOE in 2015 to 19.19 tonnes CO2e per mBOE in 2016. The production has decreased since 2015, mainly due to operational disruptions in the form of shut-downs.
2016	Exploration, production & gas processing	Extraheavy oil	70.52	5.27	Decrease	The CO2 intensity of the Extra Heavy Oil segment decreased from 74.44 tonnes CO2e per mBOE in 2015 to 70.52 tonnes CO2e per mBOE in 2016. The main reason for the variance in both CO2 (decreased) and production (increased) is due to several large scale events in 2016, like shutdowns and decreased stream output due to initial streaming. One facility was only operating with 75 % capacity in August due to pigging operations, leading to higher production for the rest of 2016.
2016	Exploration, production & gas processing	Tight oil	27.58	4.27	Increase	The CO2 intensity of the Tight Oil segment has increased from 26.45 tonnes CO2e per mBOE in 2015 to 27.58 tonnes CO2e per mBOE. in 2016. There has been an decrease in production and scope 1 emission, but an increase in scope 2 emissions. Scope 1 emissions are still decreasing due to continued infrastructure improvement to reduce flaring volumes. Scope 2 emissions have increased due to more well sites in production in 2016 than in 2015, which is using more electrically powered equipment to provide power at the well sites

Year ending	Segment	Hydrocarbon/product	Emissions intensity (metric tonnes CO2e per thousand BOE)	% change from previous year	Direction of change from previous year	Reason for change
2016	Exploration, production & gas processing	Shale gas	9.46	58.57	Increase	The CO2 intensity of the Shale Gas segment has increased significantly, from 5.96 tonnes CO2e per mBOE in 2015 to 9.46 tonnes CO2e per mBOE in 2016. This is due to increased flaring and fuel gas consumption (compression) from Repsol facilities added into one of Statoil's portfolio.

OG5.2

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

Exploration, refining (including LNG), office buildings, and research facilities are not included in the scope of the intensity reporting.

The methodology for the intensities calculation is the same as in the man information request - total Scope 1 and 2, expressed as CO2e, divided by sales volumes, per segment.

There is a slight limitation to the CO2 scope for the Extra heavy oil and conventional oil an gas segments, to align with local routines for intensity calculations. The difference in CO2 equivalents is less than 0,2% of the total upstream scope. The production figures for the LNG segment is the upstream volume going into the LNG facility.

Further Information

Page: OG6. Development strategy - (1 Jan 2016 - 31 Dec 2016)

OG6.1

For each relevant strategic development area, please provide financial information for the reporting year

Strategic development area	Describe how this relates to your business strategy	Sales generated	EBITDA	Net assets	CAPEX	OPEX	Comment
Other: Group consolidated	N/A	45688000000	11629000000	35099000000	14100000000	9025000000	Numbers according to 2016 Annual report and Form 20-F. Capital expenditures, defined as additions to property, plant and equipment (including capitalised financial leases), capitalised exploration expenditures, intangible assets, long-term share investments and investments in equity accounted companies, amounted to USD 14.1 billion, of which USD 10.1 billion were organic capital expenditures (excluding acquisitions, capital leases and other investments with significant different cash flow pattern).

OG6.2

Please describe your future capital expenditure plans for different strategic development areas

Strategic development area	CAPEX	Total return expected from CAPEX investments	Comment
Other: Group consolidated	11000000000		2016 Annual report and Form 20-F: Organic capital expenditures for 2017 (i.e. excluding acquisitions, capital leases and other investments with significant different cash flow pattern) are estimated at around USD 11 billion.

OG6.3

Please describe your current expenses in research and development (R&D) and future R&D expenditure plans for different strategic development areas

Strategic development area	R&D expenses – Reporting year	R&D expenses – Future plans	Comment
Other: Group consolidated	298000000		2016 Annual report and Form 20-F: Research and development expenditures were USD 298 million, USD 344 million and USD 476 million in 2016, 2015 and 2014, respectively. According to Statoil's climate roadmap, we expect low carbon R&D to account for 25% of research funds in 2020.

Further Information

Page: OG7. Methane from the natural gas value chain

OG7.1

Please indicate the consolidation basis (financial control, operational control, equity share) used to prepare data to answer the questions in OG7

Segment	Consolidation basis
Exploration, production & gas processing	Operational Control
Storage, transportation & distribution	Operational Control
Refining	Operational Control

OG7.2

Please provide clarification for cases in which different consolidation bases have been used

There are no cases in which the consolidation basis is different.

OG7.3

Does your organization conduct leak detection and repair (LDAR), or use other methods to find and fix fugitive methane emissions?

Yes

OG7.3a

Please describe the protocol through which methane leak detection and repair, or other leak detection methods, are conducted, including predominant frequency of inspections, estimates of assets covered, and methodologies employed

Statoil has comprehensive systems and procedures in place to support in the identification and mitigation of gas (methane) leakages. Leak detection and repair programs, in addition to other routine operations and maintenance activities, exist to monitor oil and gas processing equipment, ensuring that emissions for these unintended sources remain low. The use of a laser sensing technology (open path laser sensor – OPLS), which can assess fugitive emissions from multiple sources in a single survey event in the ppb range, has recently been introduced. Future detection and mitigation efforts will involve both OPLS and IR cameras as part of our leak detection and repair program.

For our US onshore operations, emission reduction programs aimed at finding and fixing leakages have been implemented. IR cameras 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 controllers in the Eagle Ford.

For our upstream, offshore, as well as mid-stream, operations, each installation or facility is required to define the interval (at least weekly) for the monitoring of fugitive hydrocarbon emissions. The individual installation or facility 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.) is 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 is updated after performed measurements. Leakages are identified during inspections using a variety of tools, the most common being "sniffers". The use of IR cameras to conduct inspections has been steadily increasing as well, with dozens of OGI inspections conducted on our NCS assets in the last two years. It is also relevant to note that comprehensive coverage by stationary leak detection equipment provides an additional detection layer at these installations and facilities.

Also of note, for our Norwegian, land-based processing and refining facilities, measurement using DIAL (Differential Absorption Lidar) is conducted approximately every three years.

Regardless of the type of operation, leakages above a specific threshold levels are registered and followed-up in our safety incident management tool.

OG7.3b

Please explain why not and whether you plan on conducting leak detection and repair, or other methods to find and fix fugitive methane emissions

OG7.4

Please indicate the proportion of your organization's methane emissions inventory estimated using the following methodologies (+/- 5%)

Methodology	Proportion of total methane emissions estimated with methodology	What area of your operations does this answer relate to?
Direct detection and measurement	5% to <10%	Other: Upstream operation NCS (Norwegian Continental Shelf)
Engineering calculations	25% to <50%	Other: Upstream operation NCS (Norwegian Continental Shelf)
Source-specific emission factors (IPCC Tier 3)	25% to <50%	Other: Upstream operation NCS (Norwegian Continental Shelf)
IPCC Tier 1 and/or Tier 2 emission factors	25% to <50%	Other: Upstream operation NCS (Norwegian Continental Shelf)

OG7.5

Please use the following table to report your methane emissions rate

Year ending	Segment	Estimate total methane emitted expressed as % of natural gas production or throughput at given segment	Estimate total methane emitted expressed as % of total hydrocarbon production or throughput at given segment
2016	Exploration, production & gas processing	0.02%	0.02%

OG7.6

Does your organization participate in voluntary methane emissions reduction programs?

Yes

OG7.6a

Please describe your organization’s participation in voluntary methane emissions reduction programs

Statoil is a founding member of the Climate and Clean Air Coalition Oil & Gas Methane Partnership (CCAC OGMP).

For 2015 and 2016, Statoil included all operated, upstream assets on the Norwegian Continental Shelf in the CCAC OGMP participation scope, which make up 89% of our operated production.

Statoil has also recently carried out a study describing emissions along its natural gas value chain. This study focuses on methane and other greenhouse gases and will be publicly available in July 2017.

OG7.7

Did you have a methane-specific emissions reduction target that was active (ongoing or reached completion) in the reporting year and/or were methane emissions incorporated into targets reported in CC3?

No

OG7.7a

If you have a methane-specific emissions reduction target that is not detailed as a separate target in CC3, please provide those details here, addressing all of the metrics requested in table CC3.1a or CC3.1b (for an absolute or intensity target, respectively)

OG7.7b

If methane emissions were incorporated into targets reported in CC3 (but not detailed as a separate target), please indicate which target ID(s) incorporate methane emissions, and specify the portion of those targets that is comprised of methane

OG7.7c

Please explain: (i) why you do not have a methane-specific emissions reduction target or do not incorporate methane into your targets reported in CC3; and (ii) forecast how your methane emissions will change over the next five years

The methane emissions for our upstream and midstream Norwegian operations have reached a level where they represent less than 0.02% of the emissions along the complete natural gas value chain, with very little room for significant further improvements. This is the outcome of sustained operational efforts combined with a substantial update of the quantification methods for methane and NMVOC emissions for upstream operations carried out in co-operation with the Norwegian Environmental Agency. These improvements have led to a reduction of upstream methane emissions and methane emission reduction by approximately 50% when compared to 2015. The same approach will be applied to the midstream sector in 2017. Overall, we expect our upstream methane emissions on the NCS to remain at current, low levels while emissions from the midstream sector may change due to the methodology update initiated. In parallel, we are involved in industry associations and support initiatives encouraging further work on downstream emissions.

Our US-based onshore operations are going through a series of significant modifications and we will establish an updated emission baseline across all assets for 2017. The details of a methane emission reduction plan and a methane emission forecast will then be established for the years ahead, building on our experience from the NCS.

Further Information

Due to the fact that, for some questions, the OG7 reporting module essentially limits responses to one type of operation/location, question OG7.4 has been answered from the perspective of upstream, production-related activities on the Norwegian Continental Shelf (NCS). Since almost 90% of Statoil's operated production comes from the NCS, it seemed prudent to answer the question based specifically on these operations. Work by industry and the regulators in Norway to further improve the quantification of methane emissions from upstream activities on the NCS was largely finalized in 2016 (described in detail in last year's reply and in OG7.7c above). This work has resulted in new and updated quantification methodologies for significant source types of direct methane emissions (cold venting and fugitive emissions), for these operations.The recently introduced quantification methodologies described above rely largely on quantification techniques in which source specific factors and equipment and process specific data used together. The approach could therefore be considered to be a combination of source-specific factors and engineering calculations, and therefore equivalent to the concept of Tier 2 emission factors. The "greater than 0% - less than 5%" for direct detection and measurement, is registered specifically to address the quantification of fugitive emissions. However, it must be specified that direct detection is used, but the quantification is based upon source-specific factors recommended by the Norwegian Environment Agency (link). Indirect (from e.g. incomplete combustion in flare and turbines) methane emissions (which make up ca. 30% of all methane emissions from upstream production operations) are quantified using measured gas rates and standard, NCS (or equipment) specific factors - and therefore registered as part of the Tier 2 percentage here. For our US onshore operated assets, Statoil uses US Environmental Protection Agency (EPA) calculation methodologies and emissions factors to quantify methane emissions for our onshore operated assets, in accordance with federal requirements. These estimates are included in the greenhouse gas annual report that is submitted to the EPA. For our midstream (refining and processing) operations in Norway, DIAL measurements form the basis for the quantification and reporting of methane emissions, as dictated by requirements from the Norwegian Environmental Agency. Note, in OG7.5, the methane emission rates reported for "Exploration, production & gas processing" represent the rates for our upstream and midstream activities in Norway. For the calculation of these emission rates, it is relevant to mention the following: The total hydrocarbon production (as boe), for these activities, consists of approximately 50% gas and 50% heavier fractions, while the emissions are attributed to the different fractions of hydrocarbons based on their respective share in the product mix (expressed as % boe produced). In the present case, this leads to similar ratios for the estimated total methane emissions expressed a % of natural gas production and the estimated total methane emissions expressed as a % of total hydrocarbon production.