DNO ASA - Climate Change 2022

C0. Introduction

C0.1

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

Founded in 1971, DNO is Norway's oldest oil company and the first to list on the Oslo Stock Exchange in 1981. Initially a North Sea player, our focus over the past two decades shifted to the Middle East region, home to the world's most prolific oil resources. By tapping into its Norwegian heritage and leveraging our regional footprint, DNO has proven a nimble and successful operator, even in challenging environments. In 2004, DNO was the first international oil company to enter the Kurdistan-region of Iraq (KRI), at a time when the Kurdish region's oil industry was virtually non-existent. We are now the leading international operator in terms of production and reserves in the KRI. At our flagship Tawke oil field, we began production in 2007 – just two years after the start of exploration activities. The neighbouring Peshkabir field was brought on production in 2017. Our operations in the region have among the lowest finding and development costs anywhere in the world. Combined with low lifting costs, this gives us a significant competitive advantage when oil prices are weak and strong cash flow when oil prices are robust.

DNO re-entered the North Sea in 2017, acquiring offshore exploration licenses in Norway and the UK. The company has since expanded to include several producing assets offshore Norway and the UK. Wherever we operate, we look to minimize risk and maximize success through smart exploration, and when a discovery is made, fast-track production. We are committed to safe, environmentally responsible and ethically sound operations.

DNO's Health, Safety, Security and Environment (HSSE) Policy is clear concerning our commitments to all aspects of HSSE including our environmental commitments:

• Minimize undesirable effects on the environment and biodiversity resulting from our activities;

• Promote the reduction of emissions and pollution from our operations; and

• Contribute to the sustainable development of the regions where we operate.

Business Units' (BU) internal assurance processes combined with oversight from the corporate management and the Board of Directors through its HSSE Committee ensure we meet our commitments.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2021	December 31 2021	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

Iraq
Norway
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland

C0.4

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

USD

C0.5

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

Operational control

C-OG0.7

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

Row 1

Oil and gas value chain
Upstream

Other divisions

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	DNO

C1. Governance

C1.1

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

C1.1a

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

Position of individual(s)	Please explain
Director on board	The Deputy Chairman of the Board chairs the Board Health, Safety, Security and Environment (HSSE) Committee. In addition to the Deputy Chairman, a second Director from the company's Board of Directors is a member of the Board HSSE committee. Senior executives and managers from the company participate in the HSSE Committee meetings including the Managing Director (MD) and the Chief Operating Officer (COO) of DNO corporate in addition to General Managers and HSSE Managers of our two Business Units of Kurdistan Region of Iraq and North Sea (covering Norway and the UK). This is a forum in which forward strategies are discussed and the Company's HSSE policy is adjusted, if necessary. The Chairman of the HSSE Committee takes key recommendations of the Committee to the Board of Directors for discussion and final decisions, if necessary. Material presented at each meeting includes GHG data and reduction measures which are discussed by the Committee at appropriate intervals to review performance and enable forward strategy setting. Additionally, the suite of projects to reduce our GHG emissions are discussed and endorsed at the HSSE Committee. Other GHG emissions related topics discussed in the HSSE Committee include internal price on GHG (carbon), GHG verification standards and methodologies, Company's GHG emissions targets and developments in the regulatory environment applicable to DNO operations. An example of a climate-related issue which was recently discussed in HSSE Board committee is climate-related sensitivity analysis (asset stress test based on International Energy Agency's climate scenarios) performed for disclosure in the company's 2021 Annual Report. The work was presented to the Committee by the COO and Corporate Head of Sustainability and was discussed and endorsed by the HSSE Board Committee. This work was also presented at the Audit Committee of the Board and endorsed by the Committee.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The Deputy Chairman of the Board chairs the Board Health, Safety, Security and Environment (HSSE) Committee. In addition to the Deputy Chairman, a second Director from the company's Board of Directors is a member of the Board HSSE committee. Senior executives and managers from the company participate in the HSSE Committee meetings including the Managing Director (MD) and Chief Operating Officer (COO) of DNO plus General Managers and HSSE Managers of our two Business Units of Kurdistan Region of Iraq and North Sea (covering Norway and the UK). This is a forum in which forward strategies are discussed and the Company's HSSE policy is adjusted, if necessary. The Chairman of the HSSE Committee takes key recommendations of the Committee to the Board of Directors for discussion and final decisions, if necessary. The COO leads the discussions on behalf of the company. The main material presented at each meeting includes GHG emissions data which are reviewed by the Committee at each meeting to assess performance and enable forward strategy setting. Reviewing and guiding strategy: All key strategies related to climate change including resilience to physical and transitional risks are discussed at the Board HSSE Committee level. Reviewing and guiding major plans of action and Reviewing and guiding business plans: The HSSE Committee is updated by the management on the Company's major plans of action and its business plans and progress on mitigating risks from climate change. The Committee reviews and guides major plans for action. Reviewing and guiding risk management policies: DNO's quarterly risk assessment process includes assessment of risk with impact on "Environment and Sustainability", ensuring such risks, including risks from climate change, are identified and mitigated appropriately. Setting performance objectives; Monitoring implementation and performance of objectives; and Monitoring and overseeing progress against goals and targets for addressing climate-related issues: On a quarterly basis, environmental performance (including GHG) of the Company's operations is reported to the Board HSSE Committee and the progress with respect to objectives and key performance indicators (KPI) agreed with the Board HSSE Committee at the beginning of each year is discussed. Corrective actions, if needed, are agreed on.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Criteria used for assessment include: - Education background in energy and environmental related topics - Work experience within the energy sector - Work experience in the nexus of financial markets, oil and gas operations, and evolving regulations around sustainability assessments and disclosures (e.g., climate-related sensitivity analysis and water protection) Throughout 2021, the Health, Safety, Security and Environment (HSSE) Committee of DNO's Board of Directors had two members, both of whom have extensive educational and work background related to international oil and gas operations. Specifically, one of the board members is also the Chief Operating Officer (COO) of a publicly listed energy company incorporated in the UK. Her educational background in chemical engineering and her extensive knowledge and work experience with environmental and climate issues applicable to oil and gas companies (e.g., climate-related sensitivity analysis on valuation of oil and gas companies and protection of water resources in onshore and offshore oil and gas activities) form our assessment.	<Not Applicable>	<Not Applicable>

C1.2

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

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Operating Officer (COO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly

C1.2a

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

In DNO, the CEO (in DNO terminology, the Managing Director or MD) has delegated management responsibility for Health, Safety, Security and Environment (HSSE) including climate related issues to the Chief Operating Officer (COO), within the policy framework set by HSSE and risk management policies. DNO believes that primary responsibility for all HSSE matters, including climate related issues, should be with line management. As the two Business Units' (BU) General Managers report directly to the COO, this set-up provides for clear accountability and quick decision making.

In turn, operational management of emissions is the responsibility of each BU General Manager who must ensure compliance with DNO's HSSE Policy Statement, which includes the requirement to "promote the reduction of emissions and pollution from our operations" and must aim to meet goals that are set on an annual basis, including emissions related targets.

The COO chairs a quarterly HSSE review, at which the BU General Managers report their BU's GHG emission performance and compare this with the Company's plans and targets. Where necessary, actions are agreed to improve performance and/or proposals to adjust strategy are formulated for discussion with the Board HSSE Committee.

In addition, the COO chairs a monthly review of the GHG emission reduction projects in all DNO operated assets. The meeting reviews status of projects in the planning and execution phases, identifying corrective actions where necessary, and it reviews the next set of potential projects and ideas to prioritise their implementation.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Emissions targets (including project specific targets) are included in the annual goals of the individuals on the executive team with control over emissions reduction projects (operations). At the end of each year, performance against these goals is assessed as part of the annual appraisal process. A person's rating from his/her annual appraisal impacts on the level of bonus awarded.

C1.3a

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

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Operating Officer (COO)	Monetary reward	Please select	DNO has implemented a corporate standard for GHG monitoring and control. The Standard sets internal governance and requirements for all Business Units to identify emissions reductions projects as well as to include GHG impacts/reductions in investment proposals. The COO together with the two General Managers (GM) of the Business Units (BU) as well as the Corporate Head of sustainability are responsible for the accurate monitoring and disclosure of climate-related performance data and delivering agreed plans and projects (including to improve energy consumption and reduce emissions to the extent possible within the operational limitations). Their environmental performance is included in their overall annual performance appraisal which is the basis for their bonus (monetary reward).
Business unit manager	Monetary reward	Please select	DNO has implemented a corporate standard for GHG monitoring and control. The Standard sets internal governance and requirements for all Business Units to identify emissions reductions projects as well as to include GHG impacts/reductions in investment proposals. The COO together with the two General Managers (GM) of the Business Units (BU) as well as the Corporate Head of sustainability are responsible for the accurate monitoring and disclosure of climate-related performance data and delivering agreed plans and projects (including to improve energy consumption and reduce emissions to the extent possible within the operational limitations). Their environmental performance is included in their overall annual performance appraisal which is the basis for their bonus (monetary reward).
Environment/Sustainability manager	Monetary reward	Please select	DNO has implemented a corporate standard for GHG monitoring and control. The Standard sets internal governance and requirements for all Business Units to identify emissions reductions projects as well as to include GHG impacts/reductions in investment proposals. The COO together with the two General Managers (GM) of the Business Units (BU) as well as the Corporate Head of sustainability are responsible for the accurate monitoring and disclosure of climate-related performance data and delivering agreed plans and projects (including to improve energy consumption and reduce emissions to the extent possible within the operational limitations). Their environmental performance is included in their overall annual performance appraisal which is the basis for their bonus (monetary reward).

C2. Risks and opportunities

C2.1

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

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	1	As is typical for the oil and gas industry, DNO owns its oil licenses together with other companies in unincorporated joint ventures, where one of these companies is nominated as the operator. The operator must provide its joint venturers with a detailed work program and budget, for each subsequent year. This is then approved by the joint ventures. Therefore, one year is the short-term time horizon for business planning purposes.
Medium-term	1	5	On an annual basis, DNO prepares a five-year plan to assess various pathways for development of the company. Therefore, period of five years represents the medium-term for business planning purposes.
Long-term	5	30	Typically, oil and gas licenses last for around thirty years, hence this is the long-term horizon for DNO.

C2.1b

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

DNO defines financial impact in terms of both probability of occurrence and consequence should it occur. Financial impact assessment is also part of strategic impact assessment.

DNO uses a five-by-five matrix for financial and strategic risk assessment, a common practice among oil and gas companies. The probability (likelihood of occurrence) dimension of the matrix has five options (Very Unlikely, Unlikely, Possible, Likely and Very Likely).

The consequence dimension of the matrix has five options as well (Minimal, Minor, Significant, Major and Catastrophic).

Risks which are deemed substantive are those that combine either Significant consequence with Very Likely probability of occurrence; Major consequence with Likely or Very Likely probability of occurrence; or Catastrophic consequences with Unlikely, Possible, Likely or Very Likely probability of occurrence. A substantive risk is thus either:

- A risk which is Very Likely to occur which has the potential to create damage and disruption to operations leading to losses between USD 1 million (minimum threshold to have a Significant consequence) and USD 10 million;

- A risk which is Likely to occur which has the potential to create damage and disruption to operations leading to losses between USD 10 million (minimum threshold to have a Major consequence) and USD 100 million; or

- A risk which, although Unlikely to occur, has the potential to create damage and disruption to operations leading to losses of more than USD 100 million (minimum threshold to have a Catastrophic consequence).

Any risk that does not meet the above criteria (e.g., leading to losses below USD 1 million and thus having a Minimal or Minor consequence) is considered non-substantive.

C2.2

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

Value chain stage(s) covered
Direct operations
Upstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
DNO has a well implemented process for identifying and assessing climate-related risks based on a Risk Assessment Matrix (RAM), which is included in our company-wide risk and opportunity assessment process.

On a quarterly basis, we carry out a bottom-up risk identification, assessment and review process in which key risks and opportunities associated with current and future emissions and climate change are identified and analyzed. Mitigations are put in place and these are then managed and monitored. All risks are assigned to competent owners who have the responsibility of following the closure of actions to control and/or reduce risk. The results of the process are reviewed by corporate management.

All resulting risks that are considered to have a substantive financial impact are reported to the Board's Audit Committee. Substantive HSSE related risks, including climate change related issues are also reported to the Board's HSSE Committee.

A case study of how this process is applied to physical risk relates to the environmental protection of oil and gas pipelines in Kurdistan. For part of their trajectory, these pipelines run alongside a river that is important to the communities that live alongside. This river feeds into a reservoir for hydro-electric power generation. Failure of one of these pipelines caused by storm flooding of the river has long been identified as a risk with high potential consequence, but until three years ago was considered low probability. Following severe flooding in the last four winters which resulted in severe erosion of the riverbanks near to the pipelines, DNO has re-evaluated trends from recent years and concluded that there is an increasing trend of wetter winters, possibly related to climate change. As a result, the probability of failure of these pipelines due to storms was increased in the DNO risk identification process. It has become a substantive risk (both financially and strategically) and a multi-million dollar project has been underway since 2020 to ensure adequate environmental protection is in place (Phase 1 of pipeline-river protection project was completed in 2020. Phase 2 of the project was completed in 2021 and early 2022). The progress is monitored both at the Business Unit level and Corporate, including the Board HSSE Committee.

A case study on how transitional risks are identified, assessed and responded to is the risk of more scrutiny by financial markets and institutions (e.g., shareholders and bondholders) on GHG emissions performance of oil and gas companies and the possible increase cost of raising capital and debt. This risk is on DNO's risk register and its probability and its financial impacts assessed. In order to improve DNO's emissions performance and in addition to onsite emissions reduction projects which is our primary focus (e.g., use of otherwise flared associated gas to replace diesel for onsite power generation, discussed in detail later), purchase of nature-based offsets have been extensively evaluated.

Also DNO recognizes that in order to maintain access to quality financial services and attract investors, it needs to be transparent on its climate related performance and set responsible emissions targets for its business. To address this, DNO has submitted a CDP report every year since 2008; it has had third-party verification ("Limited Assurance") of its emissions data since 2015; it has an HSSE performance section in its annual report which includes emissions goals and reporting; and adopted a new comprehensive template for its ESG reporting in September 2020 ("DNO's Corporate Social Responsibility (CSR) Report"). The new CSR template has improved transparency on ESG related matters to the financial community and enabled DNO to communicate its key emissions related targets on GHG emissions reduction (including flaring) and zero venting from routine operations.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	DNO continuously monitors current regulations in relation to its operations from the relevant local, national and international authorities. Risks from regulations are a part of our risk process and are identified and managed in each country where we operate. Example of current regulation: In Norway, emissions from oil and gas operations are subject to a national CO2 tax, in addition to pricing under European Union's Emissions Trading System (EU ETS). When assessing investments, it is important for DNO to have an informed view of how such emissions pricing is applied in order to determine the financial viability of investments that impact on emissions.
Emerging regulation	Relevant, always included	Emerging regulations are actively monitored in DNO and are identified and managed in the countries where we operate. We engage with the authorities and (where relevant) industry associations to ensure we understand emerging legislative so that we are prepared for compliance. Example of emerging regulations: If compliance with the European Union (EU) Emissions Trading System (ETS) regulations are made more expensive either through higher market prices or as a result of fewer quotas available on the market, this can lead to considerable financial implications and increased operating costs. As a case in point, the Norwegian government has proposed to increase GHG prices applicable to upstream oil and gas operations to USD 240/tCO2e by 2030 from current level of around USD 150/tCO2e. DNO is engaged with various stakeholders to better understand and prepare for increased emissions pricing.
Technology	Relevant, sometimes included	As part of the project risk assessments process, various applicable technologies are reviewed to assess if a proven technology can be deployed to lower the emissions. Examples of using new technologies and practices from our operations in Kurdistan include new well designs to reduce drilling time (and thus diesel use and GHG emissions) and deploying cameras and sniffing equipment to discover fugitive methane emissions. In the North Sea Business Unit, we are working with our joint venture partners to assess the potential and realize the opportunities to reduce the GHG emissions associated with powering offshore platforms (currently done via onsite gas turbines) through deploying offshore wind turbines and/or connecting the platform to the electricity grid onshore which is less-GHG intensive.
Legal	Relevant, always included	Compliance with climate related laws/regulations and contractual commitments is required throughout DNO. The risk of non-compliance is interruption to operations and/or fines, penalties, etc. These are in addition to potential reputation damage if such non-compliance became public. A case study of this in Kurdistan is the contractual requirement for approval from the Ministry of Natural Resources for associated gas flaring (the main contributor to DNO's GHG emissions). Although DNO seeks to minimize flaring, some level of flaring will be still required (for safety and technical/ subsurface reasons as well as infrastructure restrictions) and hence correct permits need to be in place to avoid business interruption. If not, the risk is that the government could order DNO to limit or even shut-in production. In the North Sea, there are numerous environmental and discharge permits required for operations (e.g., audit of GHG emissions for purchase of EU ETS emissions quotas). If DNO does not comply, the risk is that the necessary permits will not be forthcoming leading to delay to operations and/or with fines and penalties.
Market	Relevant, always included	We continuously monitor the market (global supply and demand for crude oil and gas) and the factors which can affect the supply and demand of our products (crude oil and gas). DNO is a relatively small oil company with less than 0.1% of global supply thus our ability to influence the market is very limited. However, global supply and demand trends impact price of oil and gas, both in short term and long term. Several years of under investment (especially in 2020 due to global oil price crash) geopolitics, increasing pressure on the oil and gas sector for improving its environmental performance, and behavioural changes as well as competing technologies are among key drivers for future of supply and demand. DNO continuously monitors these market variables as they change the price of our products (crude oil and gas). Also a specific transitional risk is implementation of border adjustments such as the discussions around EU's Carbon Border Adjustment Mechanism (effectively a levy on imported oil based on its GHG intensity). This means our Kurdistan oil production imported to the EU can become subject to an import tax (based on its GHG intensity). This will have implications for our economics. We have considered this possibility and we are continuously monitoring the regulatory discussions. These transitional risks are becoming more and more important and we – from a strategic point of view – consider them in our business planning.
Reputation	Relevant, always included	There is an increased focus on environmental and climate related issues from various stakeholders such as employees, shareholders, bond investors, insurance underwriters and financial institutions. Such considerations are increasingly important to DNO in order to continue to attract high quality staff and to reduce cost of capital (financing). A good case study of DNO's work to maintain and improve its reputation with respect to climate related matters is the company's participation in CDP. By reporting to CDP, we have shown to our investors and employees that we take climate challenges seriously and are responding accordingly and transparently. In addition, we improved our ESG/ sustainability reporting in 2020 by adopting a new template for our Corporate Social Responsibility (CSR) report, which discusses our GHG performance and our efforts to reduce our emissions.
Acute physical	Relevant, always included	DNO's risk identification process identifies acute physical risk. Acute physical risks may arise from frequent extreme weather events such as severe storms, prolonged droughts and flash floods. Case study: More extreme weathers such as more frequent and stronger storms can damage DNO's offshore facilities in the North Sea as well as disrupt operations. Criteria for storm severity are set during the engineering phase of any project and designs are required to meet these criteria. In Kurdistan, recent winters have been wetter than the historical average while the summers have been drier. These changes are likely related to climate change. Higher precipitation has resulted in much faster flow of the river adjacent to DNO's oil and gas pipelines. Severe erosion of the riverbanks has been experienced the past four winters and there is a risk that this will continue. As a result, DNO has initiated a major upgrade to the physical storm protection measures for its pipelines. The first phase of pipeline protection project was completed in 2020 and the second phase in 2021 (and early 2022).
Chronic physical	Relevant, sometimes included	Chronic physical risks related to longer-term shifts in climate patterns (examples: sea level rise, chronic heat waves, changed precipitation patterns) may present a risk to DNO's operations in the long run. DNO's operations offshore in the North Sea and onshore in the Kurdistan region of Iraq are designed to be robust in a wide range of acute physical conditions whether that be related to temperature, wind, precipitation, waves (offshore), etc. However, such chronic physical risks can increase cost of operations, especially if the "tail end" risks of climate change become more real and significant. As an example, our core area of operation (Kurdistan region of Iraq) has experienced water shortage in the summer months (although our operations have not been impacted). Reliable access to good quality water is important for our operations and wellbeing of our staff. If climate change leads to prolonged decrease in rainfalls in Kurdistan, river flows and groundwater resources can be significantly reduced (two main sources of water supply for our operations). Water shortage therefore can become a substantial risk to our business and potentially costly mitigation measures need to be put in place (e.g., deploying low-water intensive drilling and processing technologies or building long-distance water pipelines).

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
DNO has operations in three countries and regions: Kurdistan region of Iraq, Norway and the UK. Neither the Kurdistan region nor Iraq has introduced a carbon tax yet and they are not part of any cap & trade systems either. However, both Norway and the UK have GHG pricing schemes. In Norway, DNO's emissions are subject to a national CO2 tax as well as the European Emissions Trading System (EU ETS, a cap & trade system). In Norway, we are also subject to a fee for NOx emissions. The UK set up the UK Emissions Trading System (UK ETS) in 2021 following its departure from the EU and EU's ETS. For the UK and Norway, there is little we can do other than reducing our emissions or purchasing quotas to comply.

For DNO, the risk with the potential to have substantive financial impact on our business is that Iraq or the Kurdistan region introduces some form of carbon pricing. With increasing international attention to climate change and increasing carbon pricing regulations, it is possible that Iraq/ Kurdistan impose some sort of CO2 pricing. For example, the Iraqi president ratified the Paris Agreement in January 2021 following a parliamentary vote in September 2020. While uncertain at this point, Iraq is likely to introduce more environmental regulations and restrictions in order to comply with its Paris Agreement commitments and this could include carbon pricing.

As a case in point, Iraq's plan to reduce its GH emissions and meet its Paris Climate Agreement goals relies heavily on reducing flaring from its oil and gas sector. According to the World Bank, GHG emissions from flaring in Iraq's upstream oil and gas sector ranks second in the world (after Russia). A total of 17.8 billion cubic meter of associated gas was flared in 2021, responsible for 47.5 million tonnes of CO2 emissions in Iraq. This is about a quarter of Iraq's total GHG emissions. Iraq is also a signatory to the World Bank's Zero Routine Flaring (ZRF) by 2030 program. Therefore, it is expected that more regulations and restrictions on upstream flaring will come into force in Iraq. DNO currently has one of the best flaring performances in Iraq (less than 7 kgCO2 per barrel of oil produced compared to a national average of over 20). However, we expect that regulations to get tighter and all oil and gas companies including DNO will be required to reduce flaring even more. Carbon tax can be one of the measures the government can take to reduce flaring.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
20000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
In 2020, there was no regulatory carbon pricing mechanism in place in Kurdistan (or Iraq). However, considering the general trends of global regulations on GHG emissions, it is not unlikely that a regulatory CO2 price comes into effect in near/medium future. Assuming that Kurdistan/Iraq would impose a fee of USD 50/ tCO2e, then the operating cost for DNO's production in Kurdistan would increase by about USD 20 million per year.

Calculation: (USD 50/tonne CO2e in carbon tax* 10 kgCO2e/barrel of oil produced as the GHG intensity of DNO*110,000 barrels of oil produced per day as DNO's daily oil production rate *365 days in one year)= USD 20 million per year

Note that DNO's current GHG intensity in Kurdistan is about 10 kgCO2e/bbl and current production is about 110,000 barrels per day.

Cost of response to risk
16200000

Description of response and explanation of cost calculation
As a mitigation strategy to higher carbon pricing, DNO could invest in a solar PV plant in Kurdistan to reduce CO2 taxes. Estimating the costs is uncertain due to the fast pace of emerging technologies. As a case study, using a capital cost of a solar PV of USD 1,350/kW (source: USA's Energy Information Agency, EIA) with 18% capacity factor (meaning what percentage of the time the sun is available) and using a 20% annual cost of capital lead to a levelized cost of electricity (how much each unit of electricity costs) of 171 USD per MWh of solar electricity:

1,350 (capital cost per unit of kW capacity) * 20% (cost of capital) / 18% (capacity factor) / (365*24 hours in one year) *(1,000 to convert from USD/kWh to USD/MWh) = 171 USD/MWh
As the business-as-usual (base case) scenario for electricity generation, we consider using diesel. With GHG intensity of 1 tonne CO2/MWh for diesel-based electricity (source: USA's EIA), and a long-term average CO2 price of USD 50/tonne for Kurdistan, the GHG tax on diesel use for electricity generation comes to 50 USD per MWh:
1 tCO2/MWh (GHG intensity of diesel-based electricity)* USD50/ tCO2 (carbon tax) =50 USD/MWh

The fuel cost is estimated at USD 166 per MWh of diesel-based electricity. This is based on diesel price of USD 0.50/lit and efficiency of 30% and heating value of 36 MJ/lit for diesel.
USD 0.50/lit (cost of diesel) / 30% (efficiency of generator) / 36 MJ/liter (heating value of diesel) * 3600 (for unit conversion from MJ to MWh) =166 USD per MWh of diesel-based electricity

Therefore, total cost of diesel-based electricity would be 166 (fuel cost)+50 (carbon fee)=216 USD/MWh compared to the cost of solar PV of 171 USD/MWh.

As shown above, without any carbon tax, using diesel for electricity generation is cheaper (USD 166/MWh) compared to solar PV (USD 171/MWh). However, at carbon tax of USD 50/tonne, the total cost of diesel-based electricity is higher (USD 216/MWh compared to USD 171/MWh).

Considering the electricity load of Tawke license, we assume DNO will build a 12 MW solar plant to supply electricity in combination with the existing diesel-fueled generator fleet. Total investment required for a 12 MW solar PV plan to partially mitigate the risk (investment over life of the plant, e.g., 20 years):

USD 1,350/kW (unit cost of solar PV) * 12,000 kW (size of solar plant) = USD 16.2 million
This is cost to respond to the risk of higher operating costs due to introduction of a carbon tax in Kurdistan.

Comment
Note that the “Potential financial impact figure” is in USD per year. The “Cost of response to risk” is in USD for the total capital cost of the PV plant over the life of the project (e.g., 20 years) and excluding the operational and maintenance costs.

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
In Kurdistan, recent winters have been wetter than the historical average. According to IPCC, Iraq is considered one of the most vulnerable countries in the Middle East to climate change and impacts of changing weather patterns have already made themselves felt in recent years, with a higher frequency and intensity of extreme weather events. More heavy rainfalls during winter have resulted in much faster flow of the river adjacent to DNO’s oil and gas pipelines. Severe and rapid erosion of the riverbanks and/or riverbed has been experienced the past three winters during storms and it is expected that this will continue. In the worst-case scenario, such rapid erosion could lead to damage to one or both pipelines, potentially leading to pollution and the need to halt production.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
20000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The potential financial impact figure is calculated from having to shut down operations for up to a week if pipelines are damaged. A halt in production from the Tawke field in Kurdistan, which currently runs at approximately 42,000 barrels per day, would result in a loss in production of 294,000 barrels in one week. At realized oil prices of USD 70 per barrel, the lost production is valued at approximately 294,000*70= USD 20 million.

If the damage to the pipelines also resulted in pollution, the financial (and reputational) impact would be much higher. However, this figure is extremely difficult to estimate as it depends on many factors including the exact location of the damage, the extent of the damage, environmental conditions (e.g., water level and current) and speed of response. DNO has put in place third-party liability insurance for its Kurdistan operations, which will cover the costs of such an accident. The limit for this insurance policy is currently set at USD 150 million. Our assessment is that the maximum cost of environmental remediation due to a pipeline rupture to be much smaller than USD 150 million, likely an order of magnitude lower (USD 15 million).

Cost of response to risk
3000000

Description of response and explanation of cost calculation
To mitigate the risk of having to halt production in Kurdistan due to more extreme weather, DNO has initiated a major upgrade to the physical storm protection measures for its pipelines (reinforcement of riverbank and riverbed at river crossing of our pipelines in Kurdistan).

The cost of responding to the risk of more extreme weather is an estimate for the storm protection measures (both along the riverbanks and at the river crossing of pipelines) and any possible free spanning of pipelines at the bottom of the river due to faster-than- normal river flows that are being implemented (in 2020 and 2021). Example of mitigation measures are stabilizing the riverbed and reinforcing pipelines' supports in the riverbed as well as protecting riverbanks from erosion. Also, DNO has assessed the possibility of building an overpass in order not to pass the pipelines through the river.

The cost estimate is based on conceptual engineering studies, experience from similar projects (including phases one and two of the project already completed) and DNO’s internal cost database. DNO has also received quotes from third-parties for engineering and construction of an overpass for the pipelines. These quotes in addition to DNO's inhouse cost estimates are the basis for the USD 3 million estimate provided here. This is split into USD 1.4 million for the overpass bridge and USD 1.6 million for engineering, procurement, management and implementation of the riverbank and riverbed reinforcement.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Cyclone, hurricane, typhoon

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
In addition to its operations onshore, DNO operates offshore both in Norway and the UK. While offshore production facilities are less prone to extreme weathers (they are to be designed to stand extreme weather conditions, a term called “100-year storm” in Norway), offshore drilling is sensitive to weather conditions. In case of extreme weather such as storms creating massive waves, drilling operations need to be delayed or suspended until weather conditions allow for safe drilling operations. In the industry, the term Waiting on Weather (WoW) is used to express a drilling rig on standby at a safe location until weather conditions improve allowing resumption of drilling activities. WoW can be a major cost for offshore operations due to the high daily cost of offshore drilling activities, especially for complex drilling operations. In 2021 and across DNO’s assets in Norway and the UK (both operated and non-operated), there were 34 days of WoW, which implied that DNO (and its partners) had to pay rigs to be on standby due to unsuitable weather offshore in drilling locations.

Time horizon
Medium-term

Likelihood
More likely than not

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
7000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
In 2021, DNO had to pay rigs to be on standby due to unsuitable weather for offshore drilling for a total of 34 days. The net cost to DNO due to WoW during the year was about USD 7 million. As extreme weather conditions are likely increase both in intensity and frequency due to climate change, higher costs associated with WoW will become more important in the context of offshore drilling .

The USD 7 million is calculated based on the actual fees paid to the drilling rigs hired in 2021 for 34 days of Waiting on Weather (WoW).

Please note that there can be substantial annual variations in the number of WoW. For instance, the total WoW for DNO’s operations in year 2020 was 70 days (at a total cost of USD 12 million), compared to 34 days (total cost of USD 7 million) in year 2021. In addition to the changes in weather patterns, company-specific parameters (e.g., what well in which offshore location was drilled with which rig at what depth in what month of the year) can change this number.

To estimate future costs of WoW, we assume that an increase of 100% in extreme weather patterns and associated increase in the WoW days compared to year 2021. Thus, a cost of USD 14 million is estimated for total cost of WoW, which is USD 7 million higher than the cost incurred in 2021.

In summary, the potential financial impact is USD 7 million per year which is based on an increase of 100% in the costs associated with extreme weathers offshore and their impact on drilling activities (compared to year 2021).

Cost of response to risk
1000000

Description of response and explanation of cost calculation
Offshore oil and gas companies cannot control or mitigate extreme weather conditions. However, we can plan drilling operations for calmer periods as the accuracy of climate models and weather forecasts improve. DNO can subscribe to these models and forecasts for better planning of its drilling operations.

Also, as technology improves, drilling rigs can withstand more severe weather conditions, reducing the cost of Weighting on Weather (WoW) although such rigs will likely cost more to operate.

The upper bound for mitigating WoW-associated costs would be the cost of the WoW itself (estimated at USD 7 million in previous section). We estimate a partial mitigation cost (lower bound) of USD 1 million for subscribing to more accurate climate/ weather models (to better time the drilling activities).

In summary, responding to extreme weathers is not fully possible, we estimate a total cost of USD 1 million per year (cost of access to better forecasting and planning models and software) to partially mitigate the risks.

We can partially mitigate the risk as explained above, but we cannot eliminate/ fully mitigate the risk (delays in drilling activities due to extreme weathers).

Comment
Note that both the “Potential financial impact figure” and “Cost of response to risk” are in USD per year.

C2.4

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

C2.4a

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

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Other, please specify (Reduce direct emissions by reducing flaring)

Primary potential financial impact
Increased revenues resulting from increased production capacity

Company-specific description
Development of the Peshkabir field in the Tawke license in Kurdistan commenced in 2017. The oil produced had higher than expected associated gas content, leading to higher than anticipated production of associated gas (produced during the oil production process). This provided DNO with the opportunity to reinject the gas from Peshkabir into the nearby Tawke oil field for reservoir pressure management and thus improved oil recovery. The climate related opportunity driver for the project is the significant reduction in flaring of associated gas. The financial impact is that injecting gas into Tawke is expected to increase the oil reserves recoverable from the field.

At mid-year 2020, DNO commissioned the first phase of its gas capture and injection project (cost of USD 110 million). By end of 2021, DNO captured, pipelined and reinjected a total of 9.1 billion cubic feet (bcf) of Peshkabir field associated gas - which otherwise would have been flared - into the Tawke field for pressure maintenance (in addition to another 1.2 bcf reinjected at the Peshkabir field itself). Over its lifetime, gas injection is forecasted to increase oil reserves at the Tawke field by 23.3 million barrels of oil (although uncertain mainly due to reservoir performance).

Phase 2 of the gas injection project is aiming to capture and reinject any associated gas produced at the Tawke filed back into the Tawke field. This project is currently underway and is expected to commence operations by end 2022/ early 2023 for a cost of USD 25 million. This project will materially reduce flaring of associated gas at the Tawke field and help with reservoir pressure maintenance and oil recovery.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
240000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The financial impact comes from the value of added reserves and production from the Tawke field because of enhanced oil recovery from injecting Peshkabir field gas. It is calculated by multiplying the forecast incremental production due to gas injection by the forecast oil price. The share of the incremental revenue that goes to the government through the mechanism of the production sharing contract is then deducted to give the financial benefit to DNO and its partner.

The actual production impact is highly uncertain due to the heterogeneity of the Tawke reservoir. The potential financial impact figure is derived from the incremental production that reservoir modelling indicates to be most likely. The reserves associated with this incremental production are included in the DNO's proven and probable (2P) reserves.

The 2P reserves associated with the gas injection project are 23.3 million barrels of oil. Of this 18.5 million barrels goes to the government through the production sharing contract that is in place, leaving 4.8 million barrels for DNO and its partner over the life of the license (until 2036). At an assumed average realized oil price of USD 50 per barrel, this gives an increase in revenue of USD 240 million to DNO and its partner (4.8 million barrels*50 dollars per barrel of oil=USD 240 million).

Cost to realize opportunity
135000000

Strategy to realize opportunity and explanation of cost calculation
To collect produced gas at the Peshkabir field and inject it in the Tawke field, it required construction of a gas treatment plant at the Peshkabir field, gas compression and pipeline systems to transport the treated gas from the Peshkabir field to the Tawke field and retrofitting five previously drilled oil wells for gas injection at the Tawke field. The phase 1 of the project was commissioned in 2020 at a total cost of about USD 110 million.

As the project is now complete, the cost to realize the opportunity (USD 110 million) is the actual cost that DNO has spent realising the project, rounded off to the nearest USD 10 million. The main components of this project were building a gas processing facility in the Peshkabir field, a series of compressors and gas pipelines to deliver the processed gas from the Peshkabir field to the Tawke field for injection in five gas injection wells.

Phase 2 of the gas injection project is aiming to capture and reinject in to the Tawke field any associated gas produced at the Tawke filed. This project is currently underway and is expected to commission in by end 2022/ early 2023 at an estimated cost of USD 25 million. The main component of the second phase is a new gas processing plant (and associated compressors and pipelines) to enable injection of any produced gas at the Tawke field back into the Tawke field. The cost estimate is based on the DNO's internal cost estimates ahead of tendering and awarding the construction project.

Total cost: USD 110 million (phase 1) + USD 25 million (phase 2) = USD 135 million

Please note that of the total cost of USD 135 million to realize this opportunity, USD 110 million (phase 1) is already spent (mainly in 2019) and the balance (USD 25 million, phase 2) will be spent mainly in 2022.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Primary potential financial impact
Reduced direct costs

Company-specific description
To further minimize flaring of associated gas in our Kurdistan operations (in addition to gas injection, discussed under Opportunity 1), DNO is pursuing a suite of projects to utilize associated gas for onsite electricity and process heat generation.

These projects plan to use the otherwise-flared (wasted) associated gas to replace diesel and naphtha which are used onsite for heat and electricity (more GHG intensive and more expensive than using associated gas).

At year-end 2021, there were three large projects in various phases of development, which aim to utilize the otherwise-flared associated gas for electricity and process heat generation:

1- Utilizing gas-powered generators to replace diesel fueled generators at the Peshkabir field's main processing facility and at wellsites (fuel switching in electricity generation);

2- Switching the oil heater at the Peshkabir field's central processing facility from diesel to natural gas liquids (as its fuel) (fuel switching in process heat generation); and

3- Switching the boilers at the Tawke field's main processing facility from diesel and naphtha to associated gas (fuel switching in process heat generation) heaters: changing the fuel from diesel and naphtha to associated gas (process heat)

These three projects together are forecasted to save around 60,000 liters of diesel per day (made up of: 13,000 liters/day+43,000 liters/day+ 14,000 liters/day respectively for each project), which will be replaced with the otherwise-flared associated gas. At a price of USD 0.5/liter for diesel, this translates to an annual cost savings of USD 11 million for our operations.

Math: 60,000 liters/day *365 days/year * USD 0.5/liters= USD 11 million per year

In summary, through partial replacement of diesel (for onsite process heat and power generation) with the otherwise-flared associated gas, DNO is planning to reduce both its emissions and operating cost.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
11000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
At year-end 2021, there were three large projects in various phases of development, which aim to utilize the otherwise-flared associated gas for electricity and process heat generation:
1- Utilizing gas-powered generators to replace diesel fueled generators at the Peshkabir field's main processing facility and at wellsites (fuel switching in electricity generation);
2- Switching the oil heater at the Peshkabir field's central processing facility to natural gas liquids (as its fuel) from diesel (fuel switching in process heat generation); and
3- Switching the boilers at the Tawke field's main processing facility from diesel and naphtha to associated gas (fuel switching in process heat generation) heaters:

changing the fuel from diesel and naphtha to associated gas (process heat)

These three projects together are forecasted to save around 60,000 liters of diesel per day (made up of: 13,000 liters/day+43,000 liters/day+ 14,000 liters/day respectively for each project), which will be replaced with the otherwise-flared associated gas. At a price of USD 0.5/liter for diesel, this translates to an annual cost savings of USD 11 million for our operations.
(60,000 liters/day *365 days/year * USD 0.5/liters)

Cost to realize opportunity
3600000

Strategy to realize opportunity and explanation of cost calculation
DNO has done detailed engineering and technical studies, including cost estimation based on internal and external inputs for the aforementioned diesel and naphtha-to-associated gas switching projects. The cost estimates are considered to be with high certainty. All three projects are coordinated via DNO's technical office in Dubai (projects and engineering department) and implemented in the Peshkabir and Tawke fields in Kurdistan.

The cost breakdown for these three projects:
1- Running gas-powered generators and shut-down diesel fuel generators at the Peshkabir field (fuel switching in electricity generation): cost of USD 1.2 million;
2- Switching the oil heater at the Peshkabir field's central processing facility to natural gas liquids (as its fuel) from diesel (fuel switching in process heat generation): cost of USD 0.6 million
3- Switching the boilers at the Tawke field's main processing facility from diesel and naphtha to associated gas (fuel switching in process heat generation) heaters: changing the fuel from diesel and naphtha to associated gas (process heat): total cost of USD 1.8 million

Total cost of three projects: 1.2+0.6+1.8= USD 3.6 million

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Upstream

Opportunity type
Markets

Primary climate-related opportunity driver
Access to new markets

Primary potential financial impact
Increased access to capital

Company-specific description
Over the past four years, DNO has experienced an increasing number of environmental related enquiries from existing and prospective investors (shareholders and bond holders), banks, financial institutions, and insurance underwriters, collectively referred to here as the financial community.

DNO recognises that to maintain access to quality financial services and attract investors, it needs to be transparent on its climate related performance (as well as its performance in other areas of Corporate Social Responsibility CSR, and Environment, Social and Governance ESG) and set responsible emissions targets for its business.

To address this, DNO has submitted a CDP report every year since 2008; it has had third-party verification of its emissions data since 2015; it has an Health, Safety, Security and Environment (HSSE) performance section in its annual report which includes emissions goals and reporting; and adopted a comprehensive template for its ESG report in September 2020 ("DNO's Corporate Social Responsibility (CSR) Report"). DNO's CSR report has improved transparency on ESG related matters to the financial community and enabled DNO to communicate its key emissions related targets on emissions intensity and zero venting from routine operations.

We have also received positive feedback from several in the financial community on our environmental and disclosure efforts and results, including being scored B in the last three years in CDP's Climate Change category.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
7500000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The impact of our climate related performance and reporting position on emissions, the impact on share price and cost of debt is not possible to define with any certainty as they are influenced by many other factors. However, to illustrate the potential, it has been assumed that a positive perception of DNO's climate stance amongst investors could reduce the cost of bond debt through a 0.25 percent lower interest rate. As DNO currently has two bond loans, together worth USD 600 million, this would represent a saving of USD 2 million per year. The bonds mature after five years, so the saving over the bond life would be USD 7.5 million.

0.25%* USD 600 million*5 years= USD 7.5 million

Cost to realize opportunity
30000

Strategy to realize opportunity and explanation of cost calculation

Our strategy on the disclosure and reporting side is to maintain CDP reporting, external verification of emissions, improving our GHG quantification standards and policies, reporting of emissions in annual report and publishing an extensive ESG report on an annual basis with details on our environmental performance and our GHG emissions reduction efforts and results. To achieve this, in addition to internal resources such as significant mid-level and executive management time (cost of which is not included here), we occasionally utilize external consultants.

The cost stated here is the sum of costs for our third-party verification of year 2021 GHG numbers (USD 15k) and external costs for preparing our 2021 CDP disclosures (USD 15k). Note that this is on top of significant time devoted to these issues by the mid-level and senior management of the company.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan

No, our strategy has been influenced by climate-related risks and opportunities, but we do not plan to develop a transition plan within two years

Publicly available transition plan

<Not Applicable>

Mechanism by which feedback is collected from shareholders on your transition plan

<Not Applicable>

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

Attach any relevant documents which detail your transition plan (optional)

<Not Applicable>

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future

Our company's focus is on reducing emissions from our oil and gas assets. In fact, we managed to avoid more emissions (464 kt CO2e) in 2021 than what we emitted (424 kt CO2e).

None of our assets will have material production after 2035 and all of our oil and gas licenses will expire well before 2050. Therefore, developing a transition plan towards net zero by 2050 does not currently apply to us (no production and thus not emissions based on current portfolio).
We are mindful of environmental concerns around fossil-fuel based energy production and use by 2050 and afterwards and plan to take them into account for our future ventures.

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios: IEA SDS	Company-wide	<Not Applicable>	DNO conducted a series of climate-related sensitivity analysis to assess potential value of its assets under certain climate-related scenarios and disclosed the results in its 2021 Annual Report. DNO used two widely cited scenarios for oil, gas, and GHG pricing development until 2050 prescribed in the International Energy Agency's (EIA) 2021 World Energy Outlook: SDS and STEPS as listed below. The SDS scenario is a "well-below 2°C" pathway (https://www.iea.org/reports/world-energy-model/sustainable-development-scenario-sds). IEA's Sustainable Development Scenario (SDS): key assumptions applied: • oil price of USD 56 per barrel in 2030 and USD 50 per barrel in 2050 (in 2020 real terms). DNO used linear extrapolation for other years. • gas price of USD 4.2 per MMBtu in 2030 and USD 4.5 per MMBtu in 2050 (in 2020 real terms). DNO used linear extrapolation for other years. • GHG pricing in Norway: USD 240 /tCO2e by 2030 consistent with the Norwegian government's proposal (in 2020 real terms). DNO assumed the price will increase at two percent (nominal) afterwards. • GHG pricing in Kurdistan region of Iraq: No GHG price until 2030, increasing linearly to USD 35/tCO2e by 2040 and USD 95/ tCO2e by 2050, consistent with EIA's SDS scenario.
Transition scenarios: IEA STEPS (previously IEA NPS)	Company-wide	<Not Applicable>	DNO conducted a series of climate-related sensitivity analysis to assess potential value of its assets under certain climate-related scenarios and disclosed the results in its 2021 Annual Report. DNO used two widely cited scenarios for oil, gas, and GHG pricing development until 2050 prescribed in the International Energy Agency's (EIA) 2021 World Energy Outlook: SDS and STEPS as listed below. The STEPS scenario is a 2.6 °C pathway (https://iea.blob.core.windows.net/assets/aa17bd09-2ad0-4d0a-b5aa-ee418900c4af/Theimpactsofnewemissionspledgesonlongtermtemperatures.pdf) IEA's Stated Policies Scenario (STEPS): key assumptions applied are: • oil price of USD 77 per barrel in 2030 and USD 88 per barrel in 2050 (in 2020 real terms). DNO used linear extrapolation for other years. • gas price of USD 7.7 per MMBtu in 2030 and USD 8.3 per MMBtu in 2050 (in 2020 real terms). DNO used linear extrapolation for other years. • GHG pricing in Norway: USD 240 /tCO2e by 2030 consistent with the Norwegian government's proposal (in 2020 real terms). DNO assumed the price will increase at two percent (nominal) afterwards. • GHG pricing in Kurdistan region of Iraq: No GHG price, consistent with EIA's STEPS scenario.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

The main purpose of DNO's climate-related sensitivity analysis is assessing the resiliency of its portfolio from a financial perspective under two commonly used climate-focused scenarios (IEA's SDS and IEA's STEP)

Results of the climate-related scenario analysis with respect to the focal questions

Climate sensitivity analysis using IEA's Sustainable Development scenario: Results indicated potential impairment (commonly known as "write off" outside the financial community) of USD 28 million (post-tax) on DNO assets.

Climate sensitivity analysis using IEA's Stated Policies scenario: As the oil and gas price assumptions in the IEA's Stated Policies Scenario were higher compared to DNO's long-term price assumptions, no impairments (also known as "write off") were observed under this scenario for DNO's portfolio.
These climate-related sensitivity analyses indicated that DNO's portfolio is resilient under these assumptions (to put numbers in perspective, DNO's current market capitalization is well over USD 1 billion. Therefore a potential impairment of USD 28 million is insignificant).
Also they indicated that the main factor for company's valuation is not the carbon price itself (in the form of higher OPEX) but the oil and gas prices resulting from changes to demand under the IEA scenarios.
DNO plans to repeat this sensitivity analysis exercise at least once a year and expand the scope of it as appropriate, in order to ensure its business remains well placed for energy transition and climate change.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	No	DNO's products are oil and gas. DNO's production is a small percentage of global production (~0.1%), thus DNO extremely limited ability to influence on the global trends on oil and gas consumption, associated GHG emissions and mitigation technologies and strategies implemented by global users of refined products. In order to have maximum impact on emissions from the resources available to it, DNO is better to focus on its own operations. Despite these, DNO is aware of its scope 3 emissions, the majority of which is from end use of the oil and gas we produce (e.g., combustion of natural gas and refined petroleum products). We are focused on reducing our scope 1 emissions over which we have control. While scope 2 (e.g., electricity we purchase) and 3 emissions (e.g., end use of our products) are important (all CO2 emissions contribute to global warming), our focus and priority is scope 1 showcased by our success to reduce our scope 1 emissions by over 30% between 2019 and 2021.
Supply chain and/or value chain	Evaluation in progress	Climate-related opportunities have influenced DNO's supply chain strategies. For instance, environmental and GHG performance criteria are considered in our North Sea drilling procurement activities. We recognize that due to our relatively small scale in the UK and Norway and the nature of our current activities (exploration drilling and well plugging-and-abandonment, 'P&A'), our choice of drilling rigs and our influence on suppliers to undertake large investments in order to improve their GHG performance are limited. However, in our current tendering process, we ask for disclosure of energy (and thus emissions) performance which has implications for the operating cost and GHG emissions (e.g., diesel consumption). We are currently reviewing our procurement standards with the aim both to improve GHG information disclosure in bid processes and better integrate GHG performance in our ranking and contact award procedures. We expect to be impacted by this risk/opportunity in the short-term horizon.
Investment in R&D	No	DNO does not carry out inhouse research and development activities. It seeks to take advantage of new and developing technologies through industry partnership and supply chain management. As we do not invest in inhouse R&D, climate related risks have not influenced strategy in this area.
Operations	Yes	Acute physical climate risks influence DNO's operations strategy. More extreme weather will impact when and how the company can run its operations both on shore and offshore. In Kurdistan region of Iraq, recent winters have been wetter than the historical average. It is possible that this is related to climate change. This has resulted in much faster flow of the river adjacent to DNO's oil and gas pipelines. Severe erosion of the riverbanks and the riverbed has been experienced the past four winters and it is expected that this will continue. As a result, DNO conducted a major upgrade to the physical storm protection measures for its pipelines over 2020-2021 (reinforcement of riverbanks at pipeline river crossing and reinforcement of riverbed to avoid free span of the two pipelines in the river crossing). Also, DNO has assessed the possibility of building an overpass in order not to pass the pipelines through the river. A case study of how DNO turned a climate related risk to an opportunity is flare reduction through injection of associated gas for improved oil recovery at the Tawke license in Kurdistan. With commissioning of the gas injection project in 2020, not only DNO significantly enhanced its environmental performance through minimizing flaring, but also gained financial benefits (increased oil recovery and reserves). This project remains the only gas injection project in Kurdistan to date. We expect to be impacted by this risk/opportunity in the short-term horizon.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Direct costs Capital expenditures Access to capital	Direct costs: In Kurdistan, recent winters have been wetter than the historical average. According to IPCC, Iraq is considered one of the most vulnerable countries in the Middle East to climate change and impacts of changing weather patterns have already made themselves felt in recent years, with a higher frequency and intensity of extreme weather events. More heavy rain during winter has resulted in much faster flow of the river adjacent to DNO's oil and gas pipelines. Severe erosion of the riverbanks and the riverbed has been experienced the past four winters during storms and it is expected that this will continue. If the worst were to happen and the pipelines were damaged, production would have to be shut in for about a week while repairs were carried out. To mitigate the risk of having to halt production in Kurdistan due to more extreme weather, DNO conducted a major upgrade to the physical storm protection measures for its pipelines (reinforcement of both riverbanks and riverbeds at pipeline crossings). The time horizon influenced was short term (2020 and 2021 budgets). Capital expenditures: As described in section 2.4a, development of the Peshkabir field in the Tawke license in Kurdistan commenced in 2017. The oil produced had higher than expected associated gas content. The additional gas meant that a project to process, transport and reinject the gas in the Tawke field became attractive both for financial and climate-related reasons. Phase 1 of the project was completed in mid-2020. With a capital cost of about USD 110 million, this project was by far the largest single capital expenditure for the business since the Peshkabir field came on production in 2017. Phase 2 of the gas injection project is currently underway and is expected to start operations by end 2022/ early 2023. This project aims to capture and reinject into the Tawke field any associated gas produced at the Tawke fieled. Total cost of phase 2 is estimated at USD 25 million. DNO is also actively pursuing a range of GHG reduction projects in its operations. These projects, although come at a cost, ensure DNO remains competitive in the capital markets. They also enable DNO to maintain its low GHG intensity compared to its peers. In some instances, these projects also lead to direct financial savings (i.e., if savings outweigh costs over the life of the project). This risk and opportunity have impacted our financial planning in the short-time horizon as well as the medium-time horizon. DNO has been investigating whether to procure international carbon offsets to enhance its emissions performance in addition to its efforts to reduce the emissions from its own operations. No investment decisions on offsets are made yet. Access to capital: Over the past four years, DNO has experienced an increasing number of environmental related enquiries from existing and prospective investors (shareholders and bond holders), banks, financial institutions, and insurance companies, collectively referred to here as the financial community. DNO recognizes that in order to maintain access to quality financial services and attract investors, it needs to be transparent on its climate related performance (as well as its performance in other areas of ESG) and set responsible emissions targets for its business. To address this, DNO has submitted a CDP report every year since 2008; it has had third-party verification of its emissions data since 2015; it has an HSSE performance section in its annual report which includes emissions goals and reporting; and adopted a comprehensive template for its ESG reporting in 2020 ("DNO's Corporate Social Responsibility (CSR) Report"). The new CSR report has improved transparency on ESG related matters to the financial community and enabled DNO to communicate its key emissions related targets on emissions intensity and zero venting from routine operations. We have also received positive feedback from several in the financial community on our environmental and disclosure efforts and results, including being scored B in the last three years in CDP's Climate Change category. This risk and opportunity have also impacted our financial planning in short-time horizon.

C4. Targets and performance

C4.1

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

C4.1a

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

Target reference number
Abs 2

Year target was set
2019

Target coverage
Site/facility

Scope(s)
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Base year
2019

Base year Scope 1 emissions covered by target (metric tons CO2e)
598222

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
598222

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
95

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
95

Target year
2024

Targeted reduction from base year (%)
66.67

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
199387.3926

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
399925

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
399925

% of target achieved relative to base year [auto-calculated]
49.7191056946379

Target status in reporting year
Underway

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain target coverage and identify any exclusions
Development of the Peshkabir field in the Tawke license in the Kurdistan region of Iraq commenced in 2017. As is typical in the region gas was planned to be flared. However, the oil produced at Peshkabir had higher than expected associated gas content. Consequently, the Tawke license became by far the largest contributor to DNO's GHG emissions, (598,222 tonnes CO2e in 2019, Scope 1). For this reason, in 2019 a target was set for the emissions at Tawke license to be reduced by at least two-third (66.67%) within five years (by 2024). The target was set for this facility (the Tawke license) as it is the largest source of DNO's scope 1 emissions across its global portfolio (598,222/632,512=95% in 2019).

Plan for achieving target, and progress made to the end of the reporting year
The reduction of emissions was to be achieved through a two-phase gas injection project (instead of flaring).

The first phase of the project (commissioned in 2020) involved capturing and processing associated gas produced at the Peshkabir field and pipelining it to the nearby Tawke field (within the same license). At the Tawke filed, the transported gas is injected underground for reservoir pressure management. The cost of this project was USD 110 million. By end of 2021, DNO captured, pipelined and reinjected a total of 9.1 billion cubic feet (bcf) of Peshkabir field associated gas - which otherwise would have been flared - into the Tawke field for pressure maintenance (in addition to another 1.2 bcf reinjected at the Peshkabir field itself).

Phase 2 of the project will capture and reinject into the Tawke field any associated gas produced at the Tawke field itself. This project is expected to be operational by end 2022/ early 2023, at cost of USD 25 million. It will materially reduce flaring of associated gas at the Tawke field and help with reservoir pressure maintenance and oil recovery.

Once Phase 1 and Phase 2 are both operational, flaring emissions in the Tawke license will drop significantly. Although uncertain (depending on reservoir performance), we forecast in 2024, on an average, 21 MMscf (million standard cubic feet) per day of otherwise flared associated gas will be injected. This compares to 22.1 MMscf per day of associated gas flaring in 2019.

Although uncertain, we forecast scope 1 GHG emissions of Tawke license (containing both Tawke and Peshkabir field) to be around 200,000 tCO2e in 2024 compared to 598,222 tCO2e (thus reduction of 65%).

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.1b

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

Target reference number
Int 1

Year target was set
2020

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Intensity metric
Metric tons CO2e per barrel of oil equivalent (BOE)

Base year
2019

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)
0.0137

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)
0

Intensity figure in base year for Scope 3 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)
0.0137

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure
100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure
100

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure
<Not Applicable>

% of total base year emissions in all selected Scopes covered by this intensity figure
100

Target year
2025

Targeted reduction from base year (%)
27

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]
0.010001

% change anticipated in absolute Scope 1+2 emissions

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)
0.0107

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)
0

Intensity figure in reporting year for Scope 3 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)
0.0107

% of target achieved relative to base year [auto-calculated]
81.10300081103

Target status in reporting year
Underway

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain target coverage and identify any exclusions
DNO set an ambitious GHG emissions intensity target in September 2020 when it published its first comprehensive ESG report, entitled “Corporate Social Responsibility (CSR) report”. This target was endorsed by Company's Board of Directors.

The target is to maintain total DNO scope 1 and 2 GHG emissions intensity (kg CO2e per barrel of oil equivalent produced, boe) at 10 kgCO2e/boe throughout 2030 (on a five year rolling average). This compares to the emissions intensity target set by the Oil & Gas Climate Initiative (OGCI) – made up of 12 of the world’s largest oil companies – which have pledged to reduce their average GHG intensity to 17 kgCO2e/boe by 2025 from a baseline of 23 kg CO2e/boe in 2017.

By setting its target at 10 kgCO2e/boe compared to 17 kgCO2e/boe by OGCI, DNO will remain a competitive player in the oil and gas industry in terms of GHG emissions, consistent with the company’s policy to have a light environmental footprint.

On an annual basis, DNO's emissions intensity was 10.7 kgCO2e/boe in 2021, compared to 10.3 in 2020 and 13.7 kgCO2e/boe in 2019.
On a five year rolling average basis, DNO’s emissions intensity was 9.8 kgCO2e/boe in 2021, compared to 8.2 in 2020 and 6.8 kgCO2e/boe in 2019.

Plan for achieving target, and progress made to the end of the reporting year
Our main strategy for achieving this emissions reduction target is reducing associated gas flaring in our operations. This aim was partially fulfilled in 2020 when phase 1 of Peshkabir-Tawke associated gas capture and injection project was commissioned (at total cost of USD 100 million). Throughout year 2021, engineering and design of phase 2 of the project progressed and the construction contract was awarded. The second phase of the flare reduction project is expected to become operational in late 2022/ early 2023.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to reduce methane emissions

C4.2b

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

Target reference number
Oth 1

Year target was set
2017

Target coverage
Site/facility

Target type: absolute or intensity
Absolute

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

Resource consumption or efficiency	Other, please specify (Methane emissions from routine venting)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2016

Figure or percentage in base year
14516

Target year
2020

Figure or percentage in target year
87

Figure or percentage in reporting year
1800

% of target achieved relative to base year [auto-calculated]
88.1280754037009

Target status in reporting year
Achieved

Is this target part of an emissions target?
no

Is this target part of an overarching initiative?
Other, please specify (Yes, DNO has a no routine venting policy.)

Please explain target coverage and identify any exclusions
The target here is to eliminate routine methane emissions at the Tawke license operations in Kurdistan in accordance with DNO's policy of zero venting during routine operations. In the base year (2016) an estimated 29.6 million standard cubic feet (MMscf) of gas, equivalent to approximately 14,516 tonnes of CO2e) were emitted through venting and therefore this is selected as the "Covered emissions" for this target.

This figure compares to a total of 98,384 tCO2e of scope 1 emissions in the Tawke license in 2016. Therefore, venting emissions were about 15% of total Tawke license scope 1 emissions (14,516/98,384) .

The project goal is to eliminate all venting in the Tawke license through diversion of all the gas to a low-pressure flare system. Therefore, although methane emissions are eliminated, there remain residual emissions of about 1,800 tCO2e from flared gas instead (29.6 MMscf of gas*60.8 tCO2e/MMscf=1,800 tCO2e). This translates to a reduction of 14,516-1,800=12,716 tCO2e or 87% (12,716/14,516) compared to the base year. This project was completed during 2018. DNO's goal to maintain its goal of zero venting during routine operations going forward.

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the actions which contributed most to achieving this target
The main initiative allowed DNO to achieve this target was connecting oil storage tanks at the Tawke field to low pressure flare lines instead of cold venting to the atmosphere (thus any hydrocarbon vapors are combusted instead of being released as methane emissions).

C4.3

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

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	5	
To be implemented*	4	5000
Implementation commenced*	5	42000
Implemented*	1	60
Not to be implemented	0	

C4.3b

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

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
60

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
11200

Investment required (unit currency – as specified in C0.4)
7840000

Payback period
>25 years

Estimated lifetime of the initiative
16-20 years

Comment
This project refers to building a centralized electric power generation facility at the Peshkabir field in our Tawke license in the Kurdistan region of Iraq. Before this project, the electricity demand of Peshkabir field's Central Production Facility (CPF) and gas plant was met via multiple distributed diesel-fueled generators. This project enabled replacing these distributed generators with a central generation unit with higher reliability and lower emissions. This facility is producing around 2.5 MW of electricity.

C4.3c

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

Method	Comment
Financial optimization calculations	Our GHG emissions reduction projects have associated benefits such as resource efficiency (replacing costly diesel with otherwise flared associated gas) and increased reliability (replacing sparsely located generators across the oil and gas production field with a central power station) that warrant investment.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
No

C-OG4.6

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

DNO had previously introduced a policy of zero venting during routine operations and accordingly introduced a target for zero routine venting in 2017. Prior to that date, as is typical for the oil and gas industry, DNO had methane emissions from venting of gas direct to atmosphere from processing facilities and oil storage tanks. With the achievement of this target (zero routine venting) in year 2018, all company facilities now comply with this policy and there is zero routine venting and hence zero routine methane emissions.

DNO intends to maintain its zero routine venting policy and therefore expects methane emissions over the next five years to remain at zero.

Additionally , in September 2020, DNO launched an initiative to measure, monitor and mitigate fugitive (aka residual) methane emissions at the Company's operated sites (see our answer to question C-OG4.7). This initiative was announced by DNO's Executive Chairman of the Board of Directors.

Progress made towards this Leak, Detection and Repair (LDAR) program in 2021 including developing procedures to scan various potential leakage points within the Tawke license. Additionally, equipment worth of over USD 150,000 were purchased and staff were trained for using these leak detection equipment in preparation of the field surveys planned throughout 2022. At the time of writing this report (summer 2022), surveys at two fields are completed (Peshkabir and Tawke fields).

C-OG4.7

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

Yes

C-OG4.7a

(C-OG4.7a) Describe the protocol through which methane leak detection and repair or other leak detection methods, are conducted for oil and gas production activities, including predominant frequency of inspections, estimates of assets covered, and methodologies employed.

Gas leaks (which would include methane) are not acceptable in any of DNO's operations due to the safety risk (risk of fire or explosion) they represent. In addition, the gas in DNO's Kurdistan operations also contains Hydrogen Sulphide (H2S) which is toxic if inhaled. Therefore, at all facilities DNO has automatic leak detection in the form of gas detectors, and (in Kurdistan) automatic H2S detectors as well. These automatic devices are complemented by the audio/visual/olfactory observations of the production operators on their rounds (once per shift). As such, any non-routine methane emission from a loss of containment, will be detected within seconds and mitigating action taken immediately.

Hence, the only methane emissions at DNO facilities will be "micro" emissions (called fugitive methane emissions here) through, for example, screwed fittings and instruments, that are so small that they don't trigger the automatic detectors.

In September 2020 , DNO announced its decision to introduce an LDAR program to tackle any fugitive methane emissions. This is one of the projects classified as 'under way' in the answer to question C4.3a). As of end 2021, DNO has purchased methane detection cameras and sniffers as the tools for its inhouse LDAR program and is in the process of developing and implementing its procedures for fieldwork (detection and reduction/ elimination of leaks).

Progress made towards this Leak, Detection and Repair (LDAR) program in 2021 including developing procedures to scan various potential leakage points within the Tawke license. Additionally, equipment worth of over USD 150,000 were purchased and staff were trained for using these leak detection equipment in preparation of the field surveys planned throughout 2022. At the time of writing this report (summer 2022), surveys at two fields are completed (Peshkabir and Tawke fields).

C-OG4.8

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

Yes, it is relevant to our Kurdistan operations.

Flaring is relevant to DNO's operations in Kurdistan but not to its North Sea operations. In Kurdistan, the most important flare reduction project is transfer of associated gas from the Peshkabir field, which was being flared previously, to the nearby Tawke field for underground injection. Phase 1 of the project was completed in 2020 at a total cost of about USD 110 million. By year end 2021, over 10 billion cubic feet (BCF) of gas were captured and injected.

Phase 2 of the associated gas capture and injection project (instead of flaring) is aiming to capture and reinject any associated gas produced at the Tawke filed back into the Tawke field. This project is currently underway and is expected to be operational by end 2022/ early 2023 at an estimated cost of USD 25 million.

In terms of target (and as also described in Section C4.1a: Target Abs1): DNO in 2019 set a target for the Tawke license GHG emissions to be reduced by at least two-third (66.67%) within five years (by 2024). The target coverage was set for the Tawke license as it is the largest source of DNO's scope emissions (598,222/632,512=95% of DNO's total emissions in 2019).

Once both phases of the associated gas capture and injection project are commissioned, DNO expects flaring emissions in the Tawke license will drop significantly. Although very uncertain (depending on reservoir performance), we forecast in 2024, on an average, 21 MMscf (million standard cubic feet) per day of otherwise flared associated gas will be injected. This compares to daily average of 22.1 MMscf of associated gas flaring in 2019.

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?
No

Name of organization(s) acquired, divested from, or merged with
<Not Applicable>

Details of structural change(s), including completion dates
<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

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

Scope 1

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
189444

Comment
External limited verification conducted by Ernst and Young

Scope 2 (location-based)

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
1246

Comment
External limited verification conducted by Ernst and Young

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)
0

Comment
Not applicable.

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 6: Business travel

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
3187

Comment
External limited verification conducted by Ernst and Young

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
424040

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
External limited verification conducted by Ernst and Young

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment
DNO has presence in three countries and regions: Norway, the UK, the UAE and the Kurdistan region of Iraq. While the electricity markets are fairly developed in Norway, the UK and the UAE, accessing emissions data (especially market-based emissions) from the power sector in Kurdistan is at this point impossible/ very uncertain.

C6.3

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

Reporting year

Scope 2, location-based
342

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
External limited verification conducted by Ernst and Young

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

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

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Calculating the lifecycle emissions of purchased of goods and services would be a massive task and not very reliable because of the very wide range of goods and services purchased by DNO, the diversity of our suppliers (from small local firms in rural areas of Iraq to multi-national service companies with offices and staff around the world) and the fact that only a few of the suppliers (not all) publish and disclose their emissions data - let alone product or service specific emissions data.

DNO believes the resources that would be required to carry out such an evaluation are better used on evaluating and minimising DNO's scope 1 emissions and such prioritisation is the most effective way for DNO to have a real impact on reducing emissions associated with its operations. Also we do not expect these emissions to be material compared to our direct emissions already included in Scope 1.

In summary, this category is not a priority but we are actively following industry trends and data.

Capital goods

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Calculating the lifecycle emissions of capital goods would be a massive task because of the very wide range of goods and services purchased by DNO (some goods can be even purchased as used/ second-hand), the diversity of our suppliers (from small companies in Iraq to multi-national service companies with offices and staff spread around the world) and the fact that only a few of the suppliers (not all) publish and disclose their emissions data - let alone emissions data for specific products or services which DNO procures from them.

DNO believes the resources that would be required to carry out such an evaluation are better used on evaluating and minimising DNO's scope 1 emissions and such prioritisation is the most effective way for DNO to have a real impact on reducing emissions associated with its operations. Also we do not expect these emissions to be material compared to our direct emissions already included in Scope 1.

In summary, this category is not a priority but we are actively following industry trends and data.

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

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Direct emissions from our fuel use (e.g. by field vehicles and for onsite electricity and process heat generation) are already included under Scope 1. However, these are emissions from combustion only. We acknowledge that there are emissions associated with procuring fuels (e.g., upstream, midstream, and downstream) which are relevant (although but not included in our emissions.

Upstream transportation and distribution

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Calculating the emissions associated with upstream transportation and distribution of supplies to DNO would be a huge task because of the very wide range of goods purchased by DNO, the multiple transportation/ distribution routes, and the multiple companies involved in each transportation/ distribution activity.

DNO believes the resources that would be required to carry out such an evaluation are better used on evaluating and minimising DNO's scope 1 emissions and such prioritisation is the most effective way for DNO to have a real impact on emissions. Also we do not expect these emissions to be material compared to our direct emissions already included in Scope 1.

In summary, this category is not a priority but we are actively following industry trends and data.

Waste generated in operations

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
DNO produces waste from our activities and responsibly gathers and disposes of such waste. The emissions from this transportation, disposal and when relevant, waste treatment are estimated to be very small compared with DNO's scopes 1 and 2 emissions and so evaluation has not been prioritised yet.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
1726

Emissions calculation methodology
Other, please specify (Emissions from business travel are calculated based passenger kilometres driven and air travel split by journey lengths.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
All flight-related emissions (scope 3) are calculated based on flight itineraries (provided by airlines) and established emissions factors used by DNO to estimate associated GHG emissions with those flights. Thus 100% of flight information (itineraries) are provided by airlines but DNO uses factors to calculate GHG emissions (GHG emissions figures are calculated by DNO and not provided by the airlines).

Employee commuting

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
DNO has some staff who commute (on a regular basis) internationally to and from DNO's operations in the Kurdistan region of Iraq and (to a lower extent) DNO's offices in Kurdistan, UAE, Norway and the UK. The emissions associated with the flights taken by these commuters are included under Scope 3 "business travel" and is not broken down to commuting and business travel separately.
Emissions associated with daily/routine ground transport commutes are not calculated.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There can be two subcategories in this group which can apply to DNO: emissions from leased vehicles for transportation of staff within the city of Erbil (for Kurdistan operations) and any direct emissions from drilling activities. Both of these emissions are already accounted for under Scope 1.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
DNO's operated oil and gas production in Kurdistan region of Iraq and the North Sea is transferred to third party owned pipeline networks for onward transportation to market. The emissions from such transportation systems are not yet calculated. DNO is not able to access the energy use and emissions data from its most important (largest) downstream transportation system (the Iraq/Turkey oil pipeline). Therefore, there is little purpose for DNO to evaluate this category.

Processing of sold products

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
DNO's oil and gas production and sales are a small percentage of global amount (less than 0.1%), and thus, DNO has limited influence on the global trends on processing of its oil and gas sold, associated GHG emissions and mitigation technologies and strategies implemented by global refiners and processors.

Despite these, DNO is aware of its scope 3 emissions, the part of which is from processing (refining) and transportation of our sold products (the oil and gas we produce). We are focused on reducing our scope 1 emissions over which we have control. While scope 2 (e.g., electricity we purchase) and 3 emissions are important (all CO2 emissions contribute to global warming), our focus and priority is scope 1.

Use of sold products

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
DNO's oil and gas production and sales are a small percentage of global amount (less than 0.1%), and thus, DNO has limited influence on the global trends on final use of its oil and gas sold, associated GHG emissions and mitigation technologies and strategies implemented by final users of our products.

Despite these, DNO is aware of its scope 3 emissions, the majority of which is from end use (e.g., combustion of natural gas and refined petroleum products) of the oil and gas we produce. We are focused on reducing our scope 1 emissions over which we have control. While scope 2 (e.g., electricity we purchase) and 3 emissions (e.g., end use of our products) are important (all CO2 emissions contribute to global warming), our focus and priority is scope 1 showcased by our success to reduce our scope 1 emissions by over 30% between 2019 and 2021.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
DNO has no way to influence. DNO's oil and gas production is a small percentage of global production (less than 0.1%), and thus DNO has limited influence on the global trends on oil and gas consumption, associated GHG emissions and mitigation technologies and strategies implemented by global users of petroleum products (combusted or used to make products such as plastics and clothes).

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
DNO does not have any downstream leased assets.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
DNO does not have any franchise activities.

Investments

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
DNO does not have investments other than in its own business.

Other (upstream)

Evaluation status

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
nothing to report here

Other (downstream)

Evaluation status

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
nothing to report here

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

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

Intensity figure
0.000423

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
424383

Metric denominator
unit total revenue

Metric denominator: Unit total
1004000000

Scope 2 figure used
Location-based

% change from previous year
38

Direction of change
Decreased

Reason for change
Our absolute emissions remained essentially unchanged in 2021 compared to 2020 (2% increase) while our revenues increased significantly (by 63%) as the global oil and gas markets (i.e., demand and consequently prices due to pressure on supply) partially recovered from the COVID-19 induced crash.

In summary:
- change in emissions: +2%
- change in revenues: +63%
- change in emissions intensity (emissions over revenues): - 38%

C-OG6.12

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

Unit of hydrocarbon category (denominator)
Thousand barrels of crude oil/ condensate

Metric tons CO2e from hydrocarbon category per unit specified
10.7

% change from previous year
4

Direction of change
Increased

Reason for change
Both our production and emissions were essentially unchanged in 2021 compared to 2022.
Our production in 2021 averaged 110,282 barrels of oil per day in 2021 (1% lower than 2020). Our emissions were 2% higher in 2021 compared to 2020. The net effect of these small changes was a marginal increase of 4% in our emissions intensity.
Note that we had more field activities and thus emissions in Norway and the UK in 2021 compared to 2020 which partly explains the increase in emissions despite our emissions reduction efforts in our core area of operations (Kurdistan). The most notable emissions reduction project in 2021 was injection (the bulk of) associated gas produced, instead of flaring in our Tawke license in the Kurdistan region of Iraq.

Comment

C-OG6.13

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

Oil and gas business division
Upstream

Estimated total methane emitted expressed as % of natural gas production or throughput at given division
0

Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division
0

Comment

C7. Emissions breakdowns

C7.1

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

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	423315	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	309	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	416	IPCC Fifth Assessment Report (AR5 – 100 year)

C-OG7.1b

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

Emissions category
Combustion (excluding flaring)
Flaring

Value chain
Upstream

Product
Oil

Gross Scope 1 CO2 emissions (metric tons CO2)
400141

Gross Scope 1 methane emissions (metric tons CH4)
9.4

Total gross Scope 1 emissions (metric tons CO2e)
400775

Comment
In 2021, DNO had oil and gas production (on an operated basis) only in the Kurdistan region of Iraq. Our operated activities in Norway and the UK were not for oil and gas production but for plug and abandonment of wells in a few shut-in oil and gas fields.
The numbers presented here are only for Kurdistan, therefore.

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Iraq	400775
United Arab Emirates	0
Norway	13546
United Kingdom of Great Britain and Northern Ireland	23266

C7.3

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

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Kurdistan (and UAE)	400775
North Sea	23266
Corporate	0

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

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	424040	<Not Applicable>	All of our scope 1 and 2 emissions fall within upstream activities.
Oil and gas production activities (midstream)	0	<Not Applicable>	not applicable to DNO
Oil and gas production activities (downstream)	0	<Not Applicable>	not applicable to DNO
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Iraq	254	
Norway	69	
United Arab Emirates	6	
United Kingdom of Great Britain and Northern Ireland	13	

C7.6

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

By business division

C7.6a

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

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Kurdistan (and UAE)	323	
North Sea (Norway and the UK)	18	
Corporate (Oslo office)	0.3	

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

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	342		All of our scope 1 and 2 emissions fall within upstream activities.
Oil and gas production activities (midstream)	0		not applicable to DNO
Oil and gas production activities (downstream)	0		not applicable to DNO
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.9

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

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	We do not directly use any renewable electricity. However it is of note that in some of the countries where we operate (Norway and the UK) there is significant penetration of renewables in the electric grid thus we indirectly use renewable energies.
Other emissions reduction activities	35592	Decreased	9	DNO's main emissions reduction activity in 2021 was underground injection of associated gas (instead of flaring) produced at the Peshkabir field within the Tawke license in the Kurdistan region of Iraq. Flaring emissions at the Tawke license dropped by 12% or 35,592 tCO2e in 2021 compared to year 2020. Calculation of emissions value (%): Reduced flaring emissions: 35,592 tCO2e DNO's scopes 1+2 emissions in 2020= 416,894 tCO2e Ratio= 35,592/416,894= -9%
Divestment	0	No change	0	Not applicable to 2021
Acquisitions	0	No change	0	Not applicable to 2021
Mergers	0	No change	0	Not applicable to 2021
Change in output	30885	Increased	7	Following slowdown of activities due to COVID-19 in year 2020, DNO increased its field activities in year 2021. Notably, production at the Peshkabir field within the Tawke license in the Kurdistan region of Iraq increased. Non-flaring emissions from the Tawke license in year 2021 totaled 131,564 tOC2e which was 7% (30,885 tCO2e) higher than the comparative figure for year 2020. Calculation of emissions value (%): Increased non-flaring related emissions at the Tawke license in 2021: 30,885 tCO2e DNO's scopes 1+2 emissions in 2020= 416,894 tCO2e Ratio= 30,885/416,894= +7%
Change in methodology	6949	Increased	2	We expanded the scope of our emissions accounting so that supply vessels and drilling equipment leaded for less than 6 months used in our offshore operations are also included in our Scope 1 emissions in year 2021 (previously under scope 3). Emissions from our UK offshore activities increased in year 2021 by 6,949 tCO2e mainly due to this change in accounting. Calculation of emissions value (%): Change in emissions: 6,949 tCO2e DNO's scopes 1+2 emissions in 2020= 416,894 tCO2e Ratio= 6,949/416,894= +2%
Change in boundary	0	No change	0	Not applicable to 2021
Change in physical operating conditions	5398	Increased	1	This change is the net effect of reduced activity due to suspension of field work at the Baeshiqa license in the Kurdistan region of Iraq (reduction of 8,148 tCO2e in emissions in 2021) and increased activity in offshore Norway due to plug and abandonment (P&A) project at the Oselvar field (increase of 13,546 tCO2e in 2021). The net effect is an increase of 5,395 tCO2e in emissions in 2021. Calculation of emissions value (%): Net change in emissions: 5,395 tCO2e DNO's scopes 1+2 emissions in 2020= 416,894 tCO2e Ratio= 5,395/416,894= +1%
Unidentified	0	No change	0	Not applicable to 2021
Other	0	No change	0	DNO's scope 1+2 emissions in 2021 totaled 424,375 tCO2e compared to 416,894 tCO2e in 2020. This led to a small increase of 2% in emissions. As explained in above rows, this was net effect of flaring reduction activities (-9%) which was offset by increased activities (change in output and change in boundary) across our portfolio (7%+1%=8%) and change in methodology (+2%).

C7.9b

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

Location-based

C8. Energy

C8.1

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

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

C8.2

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

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	613528	613528
Consumption of purchased or acquired electricity	<Not Applicable>	0	1202	1202
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	0	614730	614730

C8.2b

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

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

C8.2c

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

Sustainable biomass

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Sustainable biomass did not apply to DNO in 2021

Other biomass

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
biomass did not apply to DNO in 2021

Other renewable fuels (e.g. renewable hydrogen)

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Other renewable fuels did not apply to DNO in 2021

Coal

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
we did not combust any coal in 2021

Oil

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
we did not combust any coal in 2021

Gas

Heating value
LHV

Total fuel MWh consumed by the organization
128725

MWh fuel consumed for self-generation of electricity
128725

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
LHV

Total fuel MWh consumed by the organization
484803

MWh fuel consumed for self-generation of electricity
367253

MWh fuel consumed for self-generation of heat
29853

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
This category includes use of diesel, naphtha and petrol.
DNO uses diesel in its Kurdistan operations for process heat, electricity generation, and mechanical energy (e.g., drilling rigs). The majority of diesel use is for electricity generation; therefore, for simplicity, we have assumed all diesel used in Kurdistan is for electricity generation. All of naphtha use is for process heat. All of petrol used is for transportation (vehicle fuel use).

Total fuel

Heating value
LHV

Total fuel MWh consumed by the organization
613528

MWh fuel consumed for self-generation of electricity
495978

MWh fuel consumed for self-generation of heat
29853

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	174855	148793	0	0
Heat	29853	29853	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area
Norway

Consumption of electricity (MWh)
721.7

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
721.7

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)
26.7

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
26.7

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Iraq

Consumption of electricity (MWh)
280.3

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
280.3

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
United Arab Emirates

Consumption of electricity (MWh)
173.6

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
173.6

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

C9. Additional metrics

C9.1

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

C-OG9.2a

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

	In-year net production	Comment
Crude oil and condensate, million barrels	32.4	2021 production (company working interest/ net to DNO)
Natural gas liquids, million barrels	0.5	2021 production (company working interest/ net to DNO)
Oil sands, million barrels (includes bitumen and synthetic crude)	0	not applicable to DNO
Natural gas, billion cubic feet	9.5	2021 production (company working interest/ net to DNO)

C-OG9.2b

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

DNO's reserves and resources reporting is in accordance with standard guidelines advised by the Society of Petroleum Engineers (SPE) and comply with Oslo Stock Exchange disclosure requirements, Circular No. 1/2013.

Reported reserves fall within class 1-3 of the Norwegian Petroleum Directorate (NPD) classification and contingent resources (2C) fall within class 4, 5 and 7 of the NPD classification. The estimation and auditing of reserves are undertaken in accordance with generally accepted engineering and evaluation principles. It should be noted that reserves information is imprecise due to inherent uncertainties in—and the limited nature of—data upon which the reserves are predicated.

DNO has a reserves review committee consisting of competent professional geoscientists, engineers and economists to facilitate the review and reporting process and ensure compliance with standards and procedures. The committee collects and coordinates the review of all technical data and provides a full report of the Company's reserves and resources to the Managing Director for review and approval.

Economically recoverable reserves have been calculated based on input for the technical reserves and economic parameters such as license terms and projected future oil and gas prices. The reserves reported are restricted to those volumes expected to be economically recovered prior to the expiry date of the respective licenses.

International petroleum consultants DeGolyer and MacNaughton (D&M) carried out an independent assessment of the Company's licenses in the Kurdistan region of Iraq. International petroleum consultants Gaffney, Cline & Associates (GCA) carried out an independent assessment of DNO's licenses in Norway and the United Kingdom (UK). The Company internally assessed Block 47 in Yemen.

C-OG9.2c

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

	Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)	Comment
Row 1	321.4	420.6	189.5	Based on 2021 Annual Statement of Reserves and Resources (available on DNO's website)

C-OG9.2d

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

	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Crude oil/ condensate/ natural gas liquids	95	95	81	Based on 2021 Annual Statement of Reserves and Resources (available on DNO's website)
Natural gas	5	5	19	Based on 2021 Annual Statement of Reserves and Resources (available on DNO's website)
Oil sands (includes bitumen and synthetic crude)	0	0	0	not applicable to DNO

C-OG9.2e

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

Development type
Shallow-water

In-year net production (%)
14

Net proved reserves (1P) (%)
17

Net proved + probable reserves (2P) (%)
17

Net proved + probable + possible reserves (3P) (%)
17

Net total resource base (%)
60

Comment
Offshore Norway and the UK

Development type
Onshore

In-year net production (%)
86

Net proved reserves (1P) (%)
83

Net proved + probable reserves (2P) (%)
83

Net proved + probable + possible reserves (3P) (%)
83

Net total resource base (%)
40

Comment
Kurdistan region of Iraq and Yemen

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

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

	Investment in low-carbon R&D	Comment
Row 1	Yes	In 2021, DNO joined the LowEmission Center in Norway to contribute to research and development efforts for improving environmental performance of the offshore oil and gas industry. This center, which is supported by the Norwegian government and universities as well as the industry, develops new technologies for offshore energy systems and integration with renewable power production technologies.

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

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

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Unable to disaggregate by technology area	<Not Applicable>	≤20%	110000	In Norway, DNO joined the LowEmission Center in 2021 to contribute to research and development efforts for improving environmental performance of the offshore oil and gas industry. This center, which is supported by the Norwegian government and universities as well as the industry, develops new technologies for offshore energy systems and integration with renewable power production technologies. DNO does not have any inhouse R&D activities on low-carbon technologies/ products.

C-OG9.7

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

This is market sensitive information thus this is not the right forum to disclose it.

C10. Verification

C10.1

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

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

C10.1a

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

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
EY Assurance letter-2021 FY.pdf

Page/ section reference
Pages 1-3 of the attached letter

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1b

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

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
EY Assurance letter-2021 FY.pdf

Page/ section reference
Pages 1-3 of the attached letter

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1c

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

Scope 3 category
Scope 3: Business travel

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
EY Assurance letter-2021 FY.pdf

Page/section reference
Pages 1-3 of the attached letter

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

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

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
EU ETS
Norway carbon tax
UK ETS

C11.1b

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

EU ETS

% of Scope 1 emissions covered by the ETS
1

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2021

Period end date
December 31 2021

Allowances allocated
0

Allowances purchased
4730

Verified Scope 1 emissions in metric tons CO2e
4730

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment
DNO has operations in both Norway and the UK where GHG emissions from certain activities can fall under two cap & trade systems (EU ETS and UK ETS) as well as Norway's CO2 tax.
In 2021, DNO performed a plug and abandonment (P&A) project in offshore Norway (Oselvar field) which was subject to the EU ETS cap & trade. Total scope 1 emissions from this P&A campaign were 4,730 tCO2e for which DNO purchased 4,730 EU ETS quotas and submitted to the authorities. Total cost was about USD 0.5 million.
Note that DNO is a non-operator participant (owner) in several other licenses in Norway and the UK, emissions of which may be covered under the EU ETS, EK ETS and/or Norway's carbon tax. Such emissions are not reported here because as stated in section C0.5, we use "Operational Control" approach for reporting of our emissions in this questionnaire.

Although we do not report our non-operated emissions, we can quantify total fees which DNO paid for its equity share of GHG emissions in 2021: a total of USD 12 million in CO2 quotas/ CO2 taxes.

UK ETS

% of Scope 1 emissions covered by the ETS
0

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2021

Period end date
December 31 2021

Allowances allocated
0

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
0

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment
DNO has operations in both Norway and the UK where GHG emissions from certain activities can fall under two cap & trade systems (EU ETS and UK ETS) as well as Norway's CO2 tax.
In 2021, DNO did not have any operations where GHG emissions were subject to the UK ETS.
Note that DNO is a non-operator participant (owner) in several other licenses in Norway and the UK, emissions of which may be covered under the EU ETS, EK ETS and/or Norway's carbon tax. Such emissions are not reported here because as stated in section C0.5, we use "Operational Control" approach for reporting of our emissions in this questionnaire.

Although we do not report our non-operated emissions, we can quantify total fees which DNO paid for its equity share of GHG emissions in 2021: a total of USD 12 million in CO2 quotas/ CO2 taxes.

C11.1c

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

Norway carbon tax

Period start date
January 1 2021

Period end date
December 31 2021

% of total Scope 1 emissions covered by tax
0

Total cost of tax paid
0

Comment
DNO has operations in both Norway and the UK where GHG emissions from certain activities can fall under two cap & trade systems (EU ETS and UK ETS) as well as Norway's CO2 tax.
In 2021, DNO did not have any operations where GHG emissions were subject to the Norwegian CO2 tax.
Note that DNO is a non-operator participant (owner) in several other licenses in Norway and the UK, emissions of which may be covered under the EU ETS, EK ETS and/or Norway's carbon tax. Such emissions are not reported here because as stated in section C0.5, we use "Operational Control" approach for reporting of our emissions in this questionnaire.

Although we do not report our non-operated emissions, we can quantify total fees which DNO paid for its equity share of GHG emissions in 2021: a total of USD 12 million in CO2 quotas/ CO2 taxes.

C11.1d

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

DNO applies the same compliance strategy to these systems as all other laws and regulations as described in the Company's Compliance Charter: DNO manages compliance risk through three lines of defence: business management, compliance function and internal audit.

Business management is the first line of defence. Operational management has ownership, responsibility and accountability for assessing, controlling and mitigating compliance risks and develops and implements mitigation activities, including monitoring and reporting, for managing compliance risks in business activities.

As the second line of defence, the compliance function partners with the legal, risk management and, with respect to climate related issues, the Health, Safety, Security and Environment (HSSE) functions. They identify relevant compliance risk related laws, regulations and standards. They translate the laws into compliance obligations and assist management to identify their compliance risks. They support the Company's management in identifying mitigating activities to mitigate the overall compliance risk based on the executive management's risk appetite, monitor local level management's control of compliance risks and advise management on compliance matters.

Internal Audit provides management with a third line of defence through independent, objective assurance on the overall effectiveness of the design and operation of internal controls. Annual internal audit plans are established in consultation with the Board's Audit Committee and findings are reported to executive management.

Both the executive management and the Board of Directors' HSSE Committee have been debriefed on the risks and mitigation strategies.

A case study of our strategy of complying with systems that we anticipate to be regulated by is management of the risk of increased emissions intensity due to operational limitations. While GHG intensity of DNO's operations (currently about 10 kgCO2e/boe) is far below the global average of around 20 kgCO2e/boe, DNO is working on development of a frontier field in Kurdistan which during its initial phase can involve routine flaring of associated gas (due to lack of infrastructure, sales of the associated gas or using it for power generation is not possible). This can increase GHG intensity of DNO's operations with financial and reputational risks as well as regulatory risks (if a carbon price or cap & trade system is introduced in Kurdistan for instance). In response, DNO maintains a forecast for its total (absolute) GHG emissions as well as its GHG emissions intensity to better inform its decision making and mitigation processes. Also, as a mitigation strategy purchase of international offsets have been extensively evaluated.

In Norway, DNO is also working with its joint venture partners on reducing emissions. As a case in point, we have been in close discussions with our joint venture partners (five companies in total) in one of our GHG intensive assets and the subject matter experts from the industry (including one leading technology company in Norway) to potentially install floating wind turbines to replace onsite gas turbines used for powering the offshore platform of this oil and gas production license. This project can potentially result in 30% reduction in emissions. Due to its large capital expenditure and technology risk a final decision has not been made but technical work is ongoing, and a decision is expected by end 2022.

An example of a specific business strategy and activity undertaken in 2021 to comply with a carbon pricing regulation is purchasing EU ETS emissions quotas for our operated activities in Norway (Oselvar license). Due to the sharp increase in the EU ETS quota prices throughout 2021, DNO's corporate sustainability and finance teams worked closely with the finance, environmental and commercial teams in our Norwegian Business Unit to assess the most cost-efficient way of procuring EU ETS quotas. Several financial institutes were consulted for forecasting future ETS prices and to assess the pros and cons of reducing exposure to future price increases through financial instruments (e.g., hedging). In addition, internal procedures were put in place to purchase the quotas (e.g., registration with Norwegian tax administration).

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price
Navigate GHG regulations
Stress test investments

GHG Scope
Scope 1

Application
DNO has operations in three countries, two of which have well established carbon pricing mechanisms (Norway and the UK).
All of our investment decisions in Norway and the UK take into account current and forecasted future carbon prices in these countries.

In addition to Norway and the UK, DNO has operations in the Kurdistan region of Iraq. Currently, there are no regulatory CO2 pricing mechanisms in place in Iraq and there are no indications of this changing in the foreseeable future.
However, DNO has applied a carbon price to its portfolio in Kurdistan of Iraq to stress test its portfolio under two of IEA's climate-related scenarios (Stated Policies and Sustainable Development).

Actual price(s) used (Currency /metric ton)
240

Variance of price(s) used
We have three different prices to reflect the three different geographical areas we operate in: Norway, the UK and the Kurdistan region of Iraq. The price mentioned above 240 USD/tonne is for Norway in year 2030. See details below:

Norway: Consistent with the Norwegian Government's legislative proposal, DNO uses a CO2 price of USD 240/tCO2e by 2030 in Norway. We assume linear increase from current prices (around USD 150/tCO2e) to USD 240 (in 2020 real terms) by 2030. We assume the price will increase at two percent (nominal) afterwards.

The UK: We currently do not have material production or reserves in the UK (less than 1% of Company's total reserves and production). Therefore, internal carbon pricing for our current UK portfolio is not very relevant.

Kurdistan Region of Iraq: Under the IEA Sustainable Development Scenario, we assumed no GHG price until 2030, increasing from 0 in 2030 linearly to USD 35/tCO2e by 2040 and USD 95/ tCO2e by 2050. Under the Stated Policies Scenario, we did not consider any carbon pricing in Kurdistan, consistent with IEA.

Type of internal carbon price
Shadow price

Impact & implication
Norway and the UK: Current and forecasted GHG pricing is included in all of business decisions, from operating cost of existing assets to new business development (e.g., acquisition) decisions. The impact and implication can vary project to project.

As stated in section C3.2b, we have run a series of climate-change sensitivity analysis to stress test resiliency of our portfolio. We have used IEA's Sustainable Development Scenario and IEA's Stated Policies Scenario.

Sustainable Development scenario: Results indicated potential impairment (commonly known as "write off" outside the financial community) of around USD 28 million (post-tax) on DNO assets.
Stated Policies scenario: As the oil and gas price assumptions in the IEA's Stated Policies Scenario were higher compared to DNO's long-term price assumptions, no impairments (also known as "write off") were observed under this scenario.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, other partners in the value chain

C12.1d

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

The “other partners in the value chain” that are referred to here are the joint venture partners with which DNO works in its upstream projects. In the North Sea, DNO is operator in some of these joint ventures and non-operator in others. In the Kurdistan region of Iraq, it is operator in the two licenses where it has an ownership interest. In all joint ventures, we engage with joint venture partners on plans related to reduce emissions.

A case study on our climate-related engagement strategy: We have been in close discussions with our joint venture partners (five companies in total) in one of our GHG intensive oil and gas production licenses offshore Norway and the subject matter experts from the industry (including a leading technology company from Norway) to potentially install floating wind turbines to replace onsite gas turbines used for powering the offshore platform of this oil and gas production license. This project can potentially result in 30% reduction in emissions. Due to its large capital expenditure and technology risk a final decision has not been made but technical work is ongoing, and a decision is expected by end 2022. Within DNO, this project, including stakeholder engagement strategy, was discussed at the senior executive management and the Board of Directors levels. At the joint venture level, a technical study was kicked off and multiple formal and informal discussions were held in 2021 to align the partners’ interests and mature the project.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization’s purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage indirectly through trade associations

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, and we do not plan to have one in the next two years

Attach commitment or position statement(s)

<Not Applicable>

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

The quarterly board HSSE committee meeting includes the Deputy Chairman of the Board, the Managing Director (MD), Chief Operating Officer (COO) and the General Managers of DNO's business units. Through having all strategy discussions at the highest levels of the company and with the relevant senior executives actively involved, we ensure that any engagement with policy makers by company representatives is with a full understanding of DNO's goals concerning climate change including emissions management and consistent with expectations of the executive team and the Board of Directors.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (Norwegian Oil and Gas Association (NOROG))

Is your organization's position on climate change consistent with theirs?
Mixed

Has your organization influenced, or is your organization attempting to influence their position?
We are not attempting to influence their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
From NOROG's website:
https://www.norskoljeoggass.no/en/climate/climate/
● We support the UN intergovernmental panel on climate change, and want an ambitious international climate treaty. We believe that ensuring the lowest possible emissions from the fossil energy which the world needs should be a high-priority climate measure.

● We have launched a joint industry project to enhance energy efficiency. The oil and gas companies are collaborating with each other here to exchange experience, transfer knowledge and find good ways to implement energy efficiency measures. Encouraging more demonstration and pilot projects for emission-reducing technology is also an aim. We are working actively with the environmental authorities to secure even better data on methane emissions and to identify possible reductions. Methane is a powerful greenhouse gas, and reducing its emissions could provide first aid for the climate.

● An important step will be to put CO2 prices in place – preferably globally, but at least nationally and regionally – which make the most polluting fossil energy sources less profitable. Consumption can thereby be transferred to forms of energy which release less greenhouse gases. Exploring for, finding and delivering natural gas from Norway to the markets is important for ensuring stable energy supplies in addition to the share met by renewables. Emissions from oil and gas production on the Norwegian continental shelf (NCS) are 50 per cent below the world average. Reducing gas deliveries from Norway would not be beneficial for the climate. Natural gas is the solution for combating growth in coal consumption and achieving emission reductions. It is also the perfect partner for renewables, since these sources will jointly reduce coal emissions and provide stable energy supplies. The Norwegian Continental Shelf (NCS) will continue to have the world's lowest CO2 emissions per unit produced. We want to export the technology which makes this possible to other countries.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports

Status
Complete

Attach the document
2021-annual-report.pdf

Page/Section reference
Page 14 "HSSE Performance"

Content elements
Governance
Risks & opportunities
Emissions figures

Comment

Publication
In mainstream reports

Status
Underway – previous year attached

Attach the document
DNO CSR 2020.pdf

Page/Section reference
2-24

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment
DNO published its first annual comprehensive ESG report, called the DNO Corporate Social Responsibility (CSR) report in September 2020 covering 2019 performance. The Company is in the final stages of completing its 2021 CSR report, which includes data and commentary with regard to DNO's GHG emissions performance and the reduction and mitigation measures already in place and under evaluation.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	No, and we do not plan to have both within the next two years	<Not Applicable>	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	No, and we do not plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	No, and we do not plan to assess biodiversity-related impacts within the next two years	<Not Applicable>

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	No, and we do not plan to undertake any biodiversity-related actions	<Not Applicable>

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No	Please select

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
No publications	<Not Applicable>	<Not Applicable>

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Operating Officer (COO)	Chief Operating Officer (COO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms