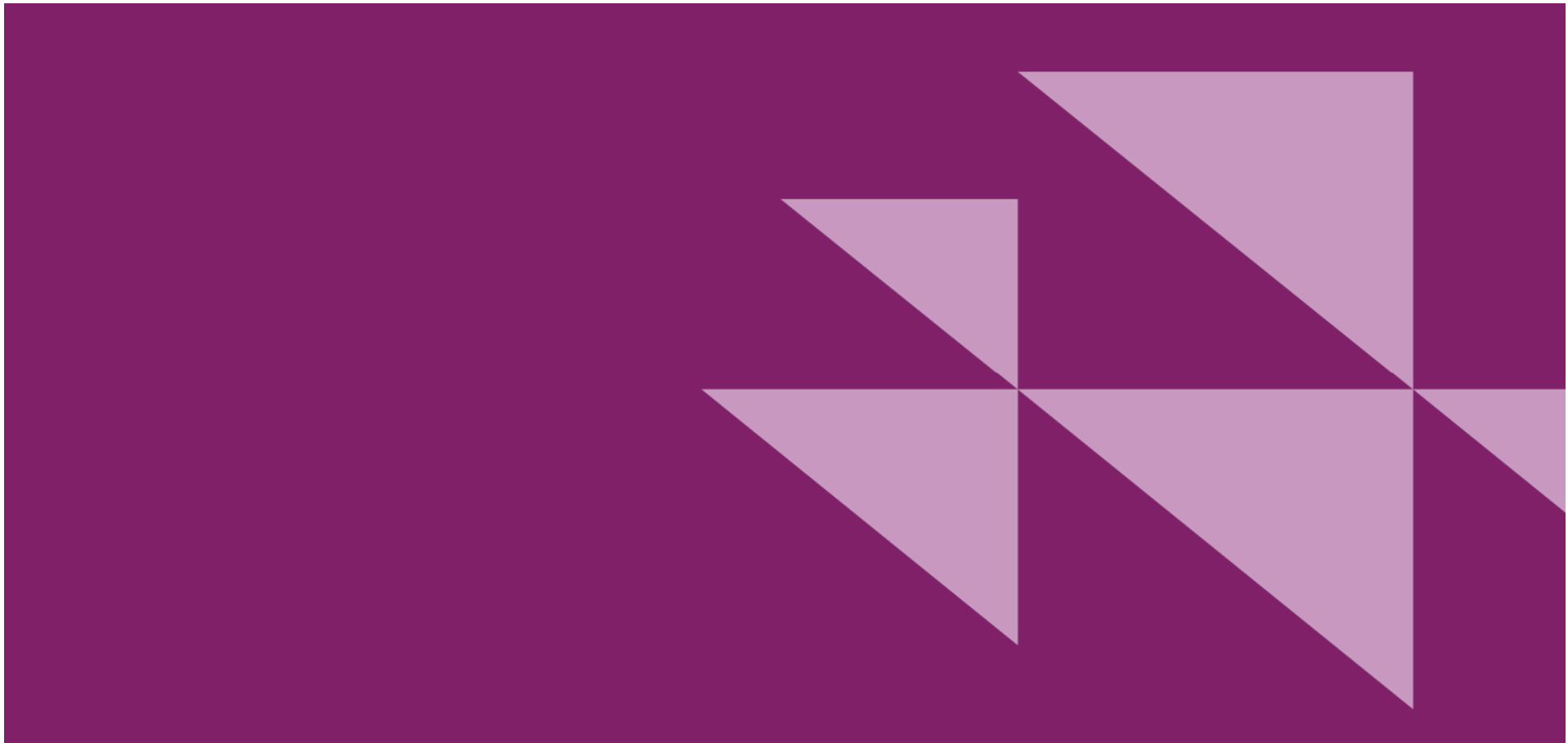


## CDP Climate Change Questionnaire 2018



# C0 Introduction

---

## Introduction

---

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

Husky Energy is a Canadian-based integrated energy company. It is based in Calgary, Alberta, Canada, and its common shares are publicly traded on the Toronto Stock Exchange under the symbol HSE. The Company operates in Canada, the United States and the Asia Pacific region with Upstream and Downstream business segments.

### (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
01/01/2017	31/12/2017	No

---

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

Country/Region
Canada and the United States. (Reserves applicable for Canada, China & Indonesia)

---

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

## Currency

CAD (\$)

---

**(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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.**

- Operational control

## Organizational activities: Chemicals

---

**(C-CH0.7) Which part of the chemicals value chain does your organization operate in?**

### **Bulk organic chemicals**

- Ethanol

### **Bulk inorganic chemicals**

- Hydrogen
- 

## Organizational activities: Oil and Gas

---

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

## **Oil and gas value chain**

- Upstream
- Downstream

## **Other divisions**

- Carbon capture and storage/utilization

## **READER ADVISORIES**

### **Forward-Looking Statements and Information**

Certain statements in this document are forward-looking statements and information (collectively “forward-looking statements”), within the meaning of applicable Canadian securities legislation, Section 21E of the United States Securities Exchange Act of 1934, as amended, and Section 27A of the United States Securities Act of 1933, as amended. The forward-looking statements contained in this document are forward-looking and not historical facts.

Some of the forward-looking statements may be identified by statements that express, or involve discussions as to, expectations, beliefs, plans, objectives, assumptions or future events or performance (often, but not always, through the use of words or phrases such as “will likely result”, “are expected to”, “will continue”, “is anticipated”, “is targeting”, “estimated”, “intend”, “plan”, “projection”, “forecast”, “guidance”, “could”, “may”, “would”, “aim”, “vision”, “goals”, “objective”, “target”, “schedules” and “outlook”). In particular, forward-looking statements in this document include, but are not limited to, references to: the Company’s general strategic plans and growth strategies; anticipated increase to carbon related payments; potential financial impacts and time horizons of identified risks; potential climate-related opportunities and their corresponding likelihood, time horizon, magnitude of impact, potential financial impact and the costs and strategies to realize the opportunities; methane reduction target and associated timeline; number of emissions reduction initiatives at various stages of development and their estimated annual CO<sub>2</sub>e savings; and anticipated investment in an hydrogen diluent reduction pilot project during 2018.

In addition, statements relating to “reserves” are deemed to be forward-looking statements as they involve the implied assessment based on certain estimates and assumptions that the reserves described can be profitably produced in the future. There are numerous uncertainties inherent in estimating quantities of reserves and in projecting future rates of production and the timing of development expenditures. The total amount or timing of actual future production may vary from reserve and production estimates.

Although the Company believes that the expectations reflected by the forward-looking statements presented in this document are reasonable, the Company’s forward-looking statements have been based on assumptions and factors concerning future events that may

prove to be inaccurate. Those assumptions and factors are based on information currently available to the Company about itself and the businesses in which it operates. Information used in developing forward-looking statements has been acquired from various sources, including third party consultants, suppliers and regulators, among others.

Because actual results or outcomes could differ materially from those expressed in any forward-looking statements, investors should not place undue reliance on any such forward-looking statements. By their nature, forward-looking statements involve numerous assumptions, inherent risks and uncertainties, both general and specific, which contribute to the possibility that the predicted outcomes will not occur. Some of these risks, uncertainties and other factors are similar to those faced by other oil and gas companies and some are unique to the Company.

The Company's Annual Information Form for the year ended December 31, 2017 and other documents filed with securities regulatory authorities (accessible through the SEDAR website [www.sedar.com](http://www.sedar.com) and the EDGAR website [www.sec.gov](http://www.sec.gov)) describe risks, material assumptions and other factors that could influence actual results and are incorporated herein by reference.

New factors emerge from time to time and it is not possible for management to predict all of such factors and to assess in advance the impact of each such factor on the Company's business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement. The impact of any one factor on a particular forward-looking statement is not determinable with certainty as such factors are dependent upon other factors, and the Company's course of action would depend upon management's assessment of the future considering all information available to it at the relevant time. Any forward-looking statement speaks only as of the date on which such statement is made and, except as required by applicable securities laws, the Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.

### **Disclosure of Oil and Gas Information**

Unless otherwise indicated: (i) reserves estimates in this document have been prepared by internal qualified reserves evaluators in accordance with the Canadian Oil and Gas Evaluation Handbook, have an effective date of December 31 in the years indicated and represent the Company's working interest share before royalties; (ii) projected and historical production volumes provided represent the Company's working interest share before royalties; and (iii) historical production volumes provided are for the year ended December 31, 2017.

The Company uses the term barrels of oil equivalent ("boe"), which is consistent with other oil and gas companies' disclosures, and is calculated on an energy equivalence basis applicable at the burner tip whereby one barrel of crude oil is equivalent to six thousand cubic feet of natural gas. The term boe is used to express the sum of the total company products in one unit that can be used for comparisons. Readers are cautioned that the term boe may be misleading, particularly if used in isolation. This measure is used for consistency with other oil and gas companies and does not represent value equivalency at the wellhead.

---

# C1 Governance

---

## Board oversight

---

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

- Yes
- 

**(C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
Director on board	The Chair of the Health, Safety and Environment (“HS&E”) Committee of the Board of Directors is responsible for the oversight of climate-related issues as part of the committee’s mandate to assist the Board by reviewing, reporting and making recommendations on the Corporation’s policies, management systems and programs with respect to HS&E issues. The Committee regularly reviews elements of Husky’s enterprise risk matrix, which includes climate change as a critical risk. The Committee is chaired by an independent director, meets at least semi-annually and advises and reports to the Co-Chairs of the Board and the Board on a regular basis as is responsibly appropriate.

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled - all meetings	<p>Reviewing and guiding strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding annual budgets</p>	<p>The Health, Safety and Environment (“HS&amp;E”) Committee of the Board of Directors meets at least semi-annually with the mandate to assist the Board by reviewing, reporting and making recommendations on the Corporation’s policies, management systems and programs with respect to HS&amp;E issues. Husky includes climate-related issues as part of its definition of HS&amp;E. The Committee’s mandate lays out specific duties as follows:</p> <p><b>Specific Duties &amp; Responsibilities:</b></p> <p>The Committee will have the oversight responsibilities and specific duties as described below.</p> <ol style="list-style-type: none"> <li>1. Review, on a periodic basis, the Corporation’s HS&amp;E policy, management systems and programs and any significant policy contraventions.</li> <li>2. Review, on a periodic basis, the Corporation’s HS&amp;E audit program and significant findings resulting from the program.</li> <li>3. Review, on a periodic basis, compliance with governmental orders, conduct of litigation and other proceedings relating to HS&amp;E matters.</li> <li>4. Review, on a periodic basis, actions and initiatives undertaken to mitigate HS&amp;E risk and/or HS&amp;E matters having the potential to affect the Corporation’s activities, plans, strategies or reputation. In addition, the Committee oversees the Corporation’s risk management framework and</li> </ol>

		<p>related processes in relation to HS&amp;E matters.</p> <p>5. Conduct a periodic review of the Corporation’s environmental remediation program.</p> <p>6. Monitor, on a periodic basis, the relationship with regulatory authorities and others outside the Corporation (including joint venture partners, neighbouring property owners, stakeholders and shareholders) on HS&amp;E issues.</p> <p>7. Act in an advisory capacity to the Board.</p> <p>8. Carry out such other responsibilities as the Board may, from time to time, set forth.</p> <p>9. Advise and report to the Co-Chairs of the Board and the Board, relative to the duties and responsibilities set out above, from time to time, set in such detail as is responsibly appropriate.</p>
--	--	--

---

## Below board-level responsibility

---

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Operating Officer (COO)	Both assessing and managing climate-related	Half-yearly



	risks and opportunities	
Executive Health, Safety and Environment Committee	Both assessing and managing climate-related risks and opportunities	Half-yearly

**(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.**

Climate-related issues are managed by the Executive Health, Safety and Environment Committee (EHSEC). It is the highest-level management committee, with a mandate to provide executive level oversight and strategic direction for all critical health, safety and environmental issues, including climate-related issues, as these have been identified as a critical risk in Husky’s enterprise risk matrix. This committee consists of members of senior management (Vice-President and above), and is chaired by the Chief Operating Officer, who holds ultimate accountability for management of, and reporting on, climate-related issues to the Board. The EHSEC maintains elements of the enterprise risk matrix related to health, safety and environment, including climate-related risk. The enterprise risk matrix is maintained by the Risk and Compliance Committee, which reports the matrix on a quarterly basis to the Audit Committee of the Board of Directors, at least semi-annually to the Health, Safety and Environment Committee of the Board of Directors, and annually to the Board of Directors.

**Employee incentives**

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

Yes

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.**

Who is entitled to benefit from these incentives?	Types of incentives	Activity incentivized	Comment
All employees	Monetary reward	Efficiency project	
Individuals nominated for HS&E awards for major sustainability accomplishments.	Recognition (non-monetary)	Recognition for specific projects that address climate change and other environmental issues through the CEO's Corporate Responsibility awards.	

---

## C2 Risks and opportunities

---

### Time horizons

---

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

Time horizon	From (years)	To (years)	Comment
Short-term	0	2	

Medium-term	2	5	
Long-term	5	15	

---

## Management processes

---

**(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.**

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

---

**(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying, and assessing climate-related risks.**

Frequency of monitoring	How far into the future are risks considered?	Comment
Six-monthly or more frequently	> 6 years	Husky's enterprise risk matrix is reviewed on a regular basis by vice presidents and managers at all levels of the Company and on a quarterly basis by the Executive Health, Safety and Environment Committee, which is composed of senior managers. Updates are provided on a quarterly basis to the Audit Committee of the Board of

		<p>Directors, at least semi-annually to the Health, Safety and Environment Committee of the Board of Directors, and annually to the Board of Directors. At the asset level, the asset managers, environmental coordinators and other appropriate individuals are informed or consulted.</p>
--	--	---

**(C2.2b) Provide further details on your organization’s process(es) for identifying and assessing climate-related risks.**

Husky uses a comprehensive greenhouse gas (GHG) management framework to identify and respond to climate-related risks and opportunities. A cornerstone of the framework is the Carbon Management Critical Competency Network (CMCC), across departmental group that convenes representatives from across Husky’s business units to share knowledge and develop guidance on carbon and climate issues.

Process scope:

Husky’s GHG management framework manages reporting, regulatory compliance, emission forecasting and emission reduction strategies. It includes:

- An emission management system
- Inventories and quantification
- Reporting and verification
- Forecasting
- Reduction and compliance strategies
- Regulatory advocacy and policy development
- Financial impact assessment
- Corporate governance

The CMCC also provides corporate guidance and recommendations around the growing financial risks and value of carbon, and contributes information to the Executive Health, Safety and Environment Committee on a regular basis. This information is also incorporated into Husky’s enterprise risk matrix, where climate-related risks are assessed alongside other critical risks to the Company. Risks deemed to have substantive financial impact to the company (greater than \$10,000,000) are highlighted for additional scrutiny.

The Carbon Management Regulatory Monitoring Committee monitors emerging regulations related to carbon, including carbon pricing, methane regulations, and clean fuel standards. The purpose of the group is to understand the cumulative impact of these emerging regulations, and to coordinate Husky's advocacy strategy to promote an outcome that achieves government objectives.

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

Risk type	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	<p>Husky's GHG management framework includes an Environmental Performance Reporting System (EPRS) for inventory, quantification, reporting and verification of GHG emissions. The Corporate Responsibility business unit with the Carbon Management Critical Competency Network and the Carbon Management Regulatory Monitoring Committee use the outputs of EPRS to quantify and manage exposure to current regulatory risk. Husky has also included carbon pricing in its long-range planning and 2018 budgeting processes. For example, Husky's Sunrise and Tucker thermal facilities used current Alberta carbon pricing of \$30/tonne to forecast compliance obligations in 2018.</p>
Emerging regulation	Relevant, always included	<p>Husky's GHG management framework includes an Environmental Performance Reporting System (EPRS) for inventory, quantification, reporting and verification of GHG emissions. The Corporate Responsibility business unit with the Carbon Management Critical Competency Network and the Carbon Management Regulatory Monitoring Committee use the outputs of EPRS alongside of jurisdiction-specific models to quantify, forecast and manage exposure to risks associated with emerging regulation from the governments of Canada and the U.S. as well as in Alberta, Saskatchewan, Manitoba, B.C., Newfoundland and Labrador, Ontario, Ohio and Wisconsin. For example, Husky has evaluated the impact of the Government of Canada's proposed backstop carbon pricing on its Canadian operations due to the possibility that provincial equivalency may not be achieved in some jurisdictions where Husky operates emissions-intensive facilities.</p> <p>By estimating its current and projected future emissions and understanding forthcoming regulations that may impact its business, the Company determines the areas of its operations that may face future</p>

Risk type	Relevance & inclusion	Please explain
		<p>compliance obligations or additional costs from regulation. Husky's enterprise risk management program supports decision making via comprehensive and systematic identification and assessment of risks that could materially impact the results of the Company. It builds risk management and mitigation into strategic planning and operational processes for its business units. Husky has developed an enterprise risk matrix to identify risks to its people, the environment, its assets and its reputation, and to systematically mitigate these risks to an acceptable level.</p>
Technology	Relevant, always included	<p>Husky's GHG Management Framework includes a process for climate-related technology assessment, including not only new innovations that can reduce the Company's emissions intensity, but also innovations that could disrupt Husky's business strategy. As new technologies are identified by subject matter experts across the Company, they are shared through the Carbon Management Critical Competency Network (CMCC) and as appropriate, are incorporated into regular updates to the Executive Health, Safety and Environment Committee and business unit leadership.</p> <p>Examples of risk from technological innovation that have been reviewed by the CMCC are the accelerating development of renewable energy infrastructure and electrification of the transportation sector. As part of its risk assessment process Husky reviewed commonly accepted forecasts of growth in these sectors to determine the impact to its short, medium and long-term strategy. Husky employed a Marginal Abatement Cost Curve (MACC) tool as part of a process to review technologies that might qualify for external funding and enhance business cases for technology risk mitigation.</p>
Legal	Relevant, always included	<p>Husky's Carbon Management Critical Competency Network (CMCC) includes representation from Husky's Legal business unit, which monitors developments in climate-related litigation that could impact Husky's business. As potential risks are identified, Husky evaluates its exposure to similar risks, and adjusts corporate policies, strategies and/or practices as deemed appropriate. For example, Husky reviewed U.S. litigation against energy companies related to their public disclosure of climate-related risk, and as a result increased scrutiny of its public disclosure of climate-related risk and modified the disclosure accordingly.</p>

Risk type	Relevance & inclusion	Please explain
Market	Relevant, always included	<p>Husky's Carbon Management Critical Competency Network (CMCC) includes representation from Upstream and Downstream business units, as well as service groups including Environment, Legal, Sustainability, Finance, Government Relations and Information Services. As climate-related risks associated with shifts in supply and demand for commodities are identified, they are evaluated and incorporated into regular reports to the Executive Health, Safety and Environment Committee and business unit leadership. For example, changes in lower-carbon and clean fuels regulations across Canada have the potential to change the market for Husky's fuel products sold in its 558 (2017 year end) retail locations in North America. CMCC has supported Husky's assessment of these market risks and ensured that knowledge has been mobilized across the organization.</p>
Reputation	Relevant, always included	<p>Husky's Carbon Management Critical Competency Network (CMCC) includes representation from Husky's Corporate Affairs business unit, which manages the Husky brand and reputation. Climate-related impacts to reputation, resulting from changing consumer or community perceptions of Husky, or the broader Canadian energy system context, are evaluated and strategies are developed and incorporated into regular reports to the Executive Health, Safety and Environment Committee and business unit leadership.</p> <p>In 2017 the CMCC developed a formal communication plan to ensure messages regarding carbon risks and opportunities were consistent, and to promote those messages both internally and externally across multiple media, including web, intranet, industry associations and direct engagement with regulators.</p>
Acute physical	Relevant, always included	<p>Event-driven, acute physical climate-related risks are identified as part of the hazardous operations planning process used by Husky. For example, Husky facilities such as well sites, pipeline infrastructure or retail stations, which are exposed to flood risk incorporate mitigation measures as part of the design and engineering process, as well as response measures, into their emergency response plans.</p>

Risk type	Relevance & inclusion	Please explain
Chronic physical	Relevant, always included	Climate-related risks from longer-term shifts in climate patterns are incorporated into operational risk assessments that influence production and facilities planning processes. For example, Husky employs a water risk assessment process that highlights exposure to drought-related risk for facilities that require access to fresh-water supply for production operations. This risk assessment process has been incorporated into facility planning for thermal facilities relying on water from the North Saskatchewan River basin.
Upstream	Relevant, always included	As part of its regulatory risk assessment process, Husky identifies risks that may have a disproportionate impact on its suppliers, and works with vendors to develop mitigation measures. For example, many of the Company's suppliers have been impacted by the Alberta carbon levy system. Husky has worked with its suppliers to ensure that a fair flow through of costs related to the levy are incorporated into its agreements.
Downstream	Relevant, always included	Regulatory, political and social barriers to pipeline projects in Canada are impacting the ability of many producers to access world commodity pricing for oil and natural gas products. These risks are incorporated into Husky's economic planning for future investment decisions through pricing assumptions, forecasted apportionment availability, toll impacts and other relevant factors. Assessments of these risks as they relate to climate issues are coordinated through the Carbon Management Critical Competency Network and Carbon Management Regulatory Monitoring Committee as deemed relevant.

**(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.**

Husky uses a comprehensive greenhouse gas (GHG) management framework to identify and respond to climate change risks and opportunities. The Carbon Management Critical Competency Network (CMCC) is a cornerstone of this framework and convenes representatives from across Husky to share knowledge and develop guidance on carbon and climate issues.



Process scope:

Husky's GHG management framework manages reporting, regulatory compliance, emission forecasting and emission reduction strategies. It includes:

- An emission management system
- Inventories and quantification
- Reporting and verification
- Forecasting
- Reduction strategies
- Regulatory advocacy and policy development
- Financial impact assessment
- Corporate Governance

The CMCC also provides corporate guidance and recommendations around the growing financial risks and value of carbon.

Risk Management Process:

By estimating its current and projected future emissions and understanding forthcoming regulations that may impact its business, the Company determines the areas of its operations that may face future compliance obligations or additional costs from regulation. Husky's enterprise risk management program supports decision-making via comprehensive and systematic identification and assessment of risks that could materially impact the results of the Company. It builds risk management and mitigation into strategic planning and operational processes for its business units through the adoption of standards and best practices. Husky has developed an enterprise risk matrix to identify risks to its people, the environment, its assets and its reputation, and to systematically mitigate these risks to an acceptable level. Husky applies its GHG management framework through the lifecycle of projects and uses general hazard assessment procedures to evaluate opportunities and risks at an asset level. The results of assessments are then incorporated into other asset planning processes.

Example:

Recent changes to Alberta climate policy include the implementation of the Carbon Competitiveness Incentive Regulation (CCIR) as a replacement for the Specified Gas Emitters Regulation (SGER) for facilities with large GHG emissions in the province. To fully understand the impacts of the new regulations, Husky employed the tools of its GHG Management Framework described above to quantify and assess

the impacts, based on current and forecast emission profiles for regulated facilities. Through this process, a new compliance strategy for each facility was developed.

#### Opportunity Management Process:

In 2017, Husky developed a Marginal Abatement Cost Curve (MACC), which catalogues opportunities to use technology to reduce emissions from operations. It compares these opportunities in terms of relative economic performance and size of reductions achievable. The MACC facilitates knowledge transfer about these technologies amongst business units and the promotion of these technologies both internally (e.g. executive teams) and externally.

#### Example:

Husky's Corporate Water Standard mandates water risk assessments for all our operations, and the development of management plans. As part of this process Husky evaluates risks, including availability, reliability, and the potential for extreme weather events, and develops mitigation plans to minimize those risks. This process incorporates climate-related impacts on water risk. When evaluating water source options for our Sunrise project, this process led to the selection of process-affected water from an adjacent company's tailing ponds as the primary source, reducing exposure to declining availability of other water sources and reducing potential capital and operating expenses relating to other, more remote or less stable water sources.

Husky quantifies risks and opportunities and determines materiality based on standard economic models integrated with other aspects of an asset or business. Prioritization is determined based on quantified impact assessment. Impact categories considered include Health and Safety, Financial, Reputation, and Environmental.

---

## Risk disclosure

---

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

Identifier	Where in the value chain does the risk driver occur?	Risk type	Primary climate-related risk driver	Type of financial impact driver	Company- specific description	Time horizon
1	Direct operations	Transition risk	Policy and legal: Mandates on and regulation of existing products and services	Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)	Risk Description: Husky is exposed to developing climate change regulations in British Columbia, Alberta, Saskatchewan, Manitoba, Newfoundland and Labrador, federally in Canada and the U.S., and in Asia. To complement the Pan-Canadian Framework on Clean Growth and Climate Change launched in December 2016, the federal government published a Clean Fuel Standard (CFS) Regulatory Framework in December 2017 that aims to eliminate 30 million metric tonnes of GHG emissions by 2030 through 10-15% reductions in fuel carbon intensities. CFS consultations are ongoing. The Canadian Federal Carbon Pricing Backstop continued to develop in 2017. The backstop will apply to jurisdictions that do not have carbon pricing systems that align to the federal benchmark. It is composed of a carbon levy applied to fossil fuels and an output-based pricing system for industrial facilities that emit above 50,000 tonnes of CO2e per year. The Canadian government will implement the backstop in whole or in part on January 1, 2019, whereas the equivalency assessment of provincial carbon pricing systems with the federal system will be completed by the end of 2018. In October 2017, the Manitoba government set out a static carbon price of \$25 per tonne beginning in 2018. An output-based pricing system of performance standards, offsets and credit trading will apply to large industrial emitters. In December 2017, the B.C. government announced consultations regarding the feasibility of its carbon intensity targets, including the potential for a 15-20% total reduction in carbon intensity of transportation fuels by 2030. The Alberta government's Carbon Competitiveness Incentives Regulation (CCIR) came into force on January 1, 2018 and replaced the Specified Gas Emitters Regulation. The CCIR regulates large carbon emitters, including Husky's Sunrise and Tucker facilities, via an output-based allocation system. Also in December 2017, the Saskatchewan government released its plan to develop and implement sector-specific output-based performance standards on facilities emitting more than 25,000 tonnes of CO2e per year. Consultations with stakeholders have been ongoing throughout 2018. In 2017, Husky paid carbon fees related to its operations in Ontario, B.C. and Alberta.	Current
2	Direct operations	Physical risk	Acute: Other	Reduced revenue from decreased production capacity	Risk Description: Husky operates in some of the harshest environments in the world, including the offshore Atlantic region at the White Rose field. Climate change is expected to increase severe weather conditions, including winds, flooding, and variable temperatures that are contributing to the melting of northern ice and increased iceberg activity. The Company has a number of policies to protect people, equipment, and the environment in the event of extreme weather conditions and adverse ice conditions. Risk Effects: Icebergs and pack ice off the coast of Newfoundland and Labrador may affect Husky's offshore facilities, causing damage to equipment and potential production disruptions, spills, asset	Current

3	Direct operations	Transition risk	Market: Changing customer behavior	Market: Reduced demand for goods and/or services due to shift in consumer preferences	<p>damage and human impacts.</p> <p>Risk Description: Societal and consumer pressure to reduce GHG emissions from the transportation sector could affect the composition of the basket of fuels available to the consumer as well as improved vehicle performance, as noted in the Canadian Fuels Association's "Fuels for Life" report. Risk Effects: Increased transportation fuel prices due to carbon pricing could result in increased demand for improved vehicle performance leading to increased fuel efficiency, which may reduce demand for gasoline and diesel at Husky's 558 (2017 year end) retail locations in North America</p>	Long-term
4	Direct operations	Physical risk	Acute: Increased severity of extreme weather events such as cyclones and floods	Reduced revenue from decreased production capacity	<p>Risk Description: Where Husky has operations in flood prone areas, extreme weather events can expose the Company to increased risk of disruption to operations. Risk Effects: Flooding and extreme weather has the potential to disrupt operations in the field as well as at Husky's head office in Calgary. In June 2013, Calgary experienced a flood event that prevented access to the entire downtown core, including Husky's head office, for a week. In May of 2016, Husky shut down the Sunrise facility due to wildfires. The project was restarted in June. At the time, Sunrise was producing about 30,000 barrels per day of bitumen. Sunrise is 50% owned by JV partners, amounting to an approximate production loss net to Husky of 15,000 barrels per day.</p>	Current

Identifier	Likelihood	Magnitude of impact	Potential financial impact	Explanation of financial impact	Management method	Cost of management	Comment
1	Virtually certain	Low	\$8,581,951.58	Presently, Husky makes carbon-related payments in B.C., Ontario and Alberta. These payments totaled \$8,581,951.58 in 2017. This figure was calculated by aggregating total Ontario cap and trade credits purchased for fuel imports, Alberta carbon levy and Specified Gas Emitters Regulation payments that are not passed on to customers, and B.C. carbon fees for the Sikanni Gas Plant and Prince George Refinery. The Company's current financial exposure to fees associated with carbon emissions is approximately 0.05% of	Husky manages its exposure to uncertainty in new regulation through strategic investments that focus on positive return on investment (ROI), reduced operating costs and lower emissions intensity. Husky participates in direct and joint industry engagement with policy makers to stay abreast of emerging trends in regulation and advocate for regulatory certainty. For example, in 2016 and 2017 as the governments of Alberta and Canada expressed their intent to revise regulations concerning methane emissions to meet a 45% reduction over 2012 levels by 2025, Husky recognized the impact of these changes on its operations and joined as an active participant on	\$1,500,000	Husky's initial pilot for CO2 capture from once-through steam generator flue gas at its Lashburn, Sask. test facility began operation in 2015, capturing up to 30 tonnes a day of CO2e. The project cost approximately \$20 million, with \$6 million provided through external grants. Relevant energy efficiency projects that help mitigate GHG regulatory exposure are estimated at \$1,500,000 for 2017. Activities

Identifier	Likelihood	Magnitude of impact	Potential financial impact	Explanation of financial impact	Management method	Cost of management	Comment
				Husky's 2017 gross revenue before royalties and marketing and other income, and 3% of total Canadian energy input costs. The Company expects payments to increase with pending changes to GHG regulations in various jurisdictions, however there is some uncertainty as to the degree and pace at which increases will be incurred.	the Alberta Energy Regulator's Methane Reduction Oversight Committee and subcommittees. Participation has allowed Husky to develop a positive relationship with regulators and provide input in support of developing effective policy. Husky continues to monitor the international and domestic efforts to address climate change, including developments through the UN Conference of Parties process and emerging regulations in the jurisdictions in which the Company operates. Although the impact of emerging regulations is uncertain, they may have a material impact on the Company's finances and operations. Performance improvement may be achieved through technology. Husky invests in technology and participates in industry knowledge sharing initiatives that will help it develop operational improvements.		related to policy intelligence and advocacy are part of operating costs and are not tracked separately.
2	Very unlikely	Medium	\$129,000,000	The potential consequences of a severe weather or ice related event to Husky's offshore operations include possible production disruptions, spills, asset damage and human impacts. While this is mitigated through the methods described in this table, the potential production disruption from a two-month period of disconnection due to ice for the SeaRose Floating Production, Storage and Offloading (FPSO) vessel could result in \$129,000,000 in reduced revenues. This estimate is based on 2017 average daily production numbers of 30,000 boe (net equity share) and 2017 average gross revenue per barrel of \$71.69, as published in Husky's 2017 Annual Report. (30,000 boe x 60 days	Husky's Atlantic region business unit has a robust ice management program that uses a range of resources, including advanced detection, monitoring and management. Ice monitoring is facilitated through fixed-wing flight reconnaissance, satellite imagery processing and offshore supply vessel reconnaissance. Monitoring data is processed in georeferenced format and drift is predicted using established software developed by the National Research Council and the Canadian Ice Service. Supply vessels deflect icebergs through towing by rope or ice net, or pushing by water pressure through a high-velocity water jet nozzle or propeller wash. Husky works independently of, and jointly with, other oil and gas operators through a common ice management contractor. During ice season, Husky owned, operated and/or contracted offshore facilities are	\$5,600,000	The cost of the Company's ice monitoring and management activities was approximately \$5.6 million in 2017.  In March 2017, an iceberg came within the SeaRose floating, production, storage and offloading (FPSO) vessel's exclusion zone offshore Newfoundland and Labrador. The Company followed its ice management plan – shutting down production and making preparations to disconnect. However, it did not take the final step of disconnecting.

Identifier	Likelihood	Magnitude of impact	Potential financial impact	Explanation of financial impact	Management method	Cost of management	Comment
				X \$71.69/boe = \$129,000,000)	assigned ice observers, providing 24-hour coverage. An onshore joint ice operations coordinator is assigned to consolidate ice information between the joint operators. Regular ice surveillance flights usually commence in February, and continue until throughout iceberg season. In addition, Atlantic business unit operators employ a series of supply and support vessels to actively manage ice and icebergs. This fleet has grown over time, partly in response to changing ice conditions. Husky maintains a series of ad-hoc relationships with contractors, providing for the quick mobilization of additional resources as required.		The Company has since undertaken steps to further strengthen its ice management plan and to ensure it will be followed in any future situations. It has improved its iceberg towing capacity and implemented an onshore ice management room, providing for real-time monitoring of operations offshore. It has also upgraded radar systems to automate the transfer of ice-tracking data from offshore installations.
3	About as likely as not	Low	\$3,000,000	If Husky were to experience a 2.4% annual decrease in fuel sales, corresponding to the EIA's largest estimated decline in energy demand for any mode of transport through 2050 in its 2018 Annual Energy Outlook, the scale of potential financial impacts to the Company are in the order of \$3 million per year based on 2017 fuel revenues of \$139 million. This figure is less than 0.2% of 2017 gross revenue. The Company has growth opportunities in enhanced oil production using CO2, and ethanol-blended fuels.	As regulations develop and markets for its products change, Husky will continue to manage the risk through the Carbon Management Critical Competency Network and its Carbon Regulatory Monitoring Committee. Through these methods, Husky monitors emerging regulations, advises management and lead officers of any developments, and advocates the Company's position with the regulators. Additionally, Husky's Executive Health, Safety, and Environment Committee reviews and approves compliance and emission reduction strategies, establishes performance targets, and allocates resources as appropriate. Through the application of Husky's Enterprise Risk Management program over time, the Company will seek to develop the appropriate response to changing regulations and markets as they materialize. This includes allocating resources as appropriate to growth opportunities in natural gas, enhanced oil production using CO2, and	0	Husky has integrated its Climate Change Management Framework into everyday business operations at a corporate-services level. There are no additional material costs to manage the risks described in this response at this time. If any of these risks are determined to be more pressing or impactful, a reassessment of management plans and costs will be performed.

Identifier	Likelihood	Magnitude of impact	Potential financial impact	Explanation of financial impact	Management method	Cost of management	Comment
					ethanol blended transportation fuels. As an example of a current action to address this risk, Husky is reducing emissions through increased renewable fuel blending. In 2017, the use of ethanol blended fuel helped prevent the emission of 73,000 tonnes of CO2e.		
4	likely			Husky's business continuity plan and processes resulted in no financial losses resulting from the head office closure during the 2013 flood.	Readiness for potential emergencies is strengthened through exercises, established processes and Emergency Response Plans (ERPs) designed to guide a consistent and effective response to any event which could affect employees, contractors, the community, the environment and/or the Company's assets and reputation. Additionally, Husky develops contingency plans and measures to mitigate the impacts should a business-interrupting event occur.	0	There is no additional cost of management for this beyond Husky's existing Emergency Response planning process.



---

## Opportunity disclosure

---

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

Identifier	Where in the value chain does the opportunity occur?	Opportunity type	Primary climate-related opportunity driver	Type of financial impact driver	Company-specific description	Time horizon
1	Direct operations	Energy source	Use of supportive policy incentives	Reduced operational costs (e.g., through use of lowest cost abatement)	Opportunity Description: Husky has a number CO2 sources whose emissions may be relatively inexpensive to capture. These sources include ethanol plants, hydrogen plants and sour gas sweetening plants. However, presently there is no widespread infrastructure in place to transport captured CO2 for other uses. Regulations will influence the construction and operation of CO2 capture and transport infrastructure. Husky is operating a pilot at Lashburn, Sask., capturing up to 30 tonnes a day of CO2e from once-through steam generators for use at EOR candidate facilities. Multiple low emission technologies are under consideration for future application at thermal projects. Opportunity Effects: The CO2 sources available for carbon capture will allow Husky to respond to regulatory changes influencing carbon capture and storage and provide for reduced operating costs.	Medium-term
2	Direct operations	Resilience	Other	Increased reliability of supply chain and ability to operate under various conditions	Opportunity Description: Husky operates in some of the harshest environments in the world. These environments are subject to physical changes due to climate change including extreme weather conditions and iceberg activity that could adversely affect in onshore and offshore operations. For example, iceberg activity off the coast of Newfoundland and Labrador may affect offshore oil production facilities, including the SeaRose FPSO. The Company has developed a number of policies to protect people, equipment, and the environment in the event of extreme weather conditions. Opportunity Effects: Husky's experience in harsh environments allows the Company to effectively manage iceberg activity.	Current
3	Direct operations	Resource efficiency	Use of more efficient production and distribution processes	Increased production capacity, resulting in increased revenues	Regulations may encourage research into the use of CO2 for enhanced oil recovery. Husky completed a project in 2012 which included capturing CO2, injecting it into heavy oil reservoirs, and then using the CO2 to assist with enhanced heavy oil recovery, and continues to investigate additional capture technologies. Husky is developing this recovery method, which has not yet been applied commercially in the thin, shallow, viscous formations typical of heavy oil. Specifically, the Company is developing knowledge and methods on how to capture CO2 from its Lloydminster Ethanol Plant and other	Short Term

Identifier	Where in the value chain does the opportunity occur?	Opportunity type	Primary climate-related opportunity driver	Type of financial impact driver	Company-specific description	Time horizon
					sources; and then purify, dehydrate and compress it before transporting it to heavy oil reservoirs located in proximity to the plant. The CO2 is injected into the reservoirs and used to enhance oil recovery. When the reservoirs are fully depleted, the CO2 can be stored in the reservoir.	
4	Direct operations	Resource efficiency	Use of more efficient modes of transport	Reduced operating costs (e.g., through efficiency gains and cost reductions)	In 2017, Husky continued to use its FuelTrax Fuel Management and Monitoring system to conserve fuel and reduce air emissions from its Atlantic operations. FuelTrax records fuel consumption from Offshore Supply Vessels (OSVs) and is designed to measure diesel consumption per second. As a result, Husky expects to optimize OSVs efficiency and reduce fuel consumption and emissions on transits between port and the offshore field.	Short Term
5	Customer	Markets	Other: Shift in consumer preferences	Increased demand for existing products/services	Opportunity Description: Husky may have an opportunity to provide low-carbon fuels to meet new market demand. Certain markets are assigning premium value to low-carbon transportation fuels and coal is being phased out and replaced by natural gas as the fuel of choice for power generation. Husky is well positioned to benefit from these trends in consumer behaviour as it has growth opportunities in natural gas production and ethanol-blended gasoline. The Company's Lloydminster Ethanol Plant currently provides low carbon intensity ethanol to the B.C. market to support blending requirements to meet the province's Renewable and Low Carbon Fuels Requirements Regulation. Husky is also considering options for CO2 capture and storage at its Minnedosa Ethanol Plant in Manitoba. Opportunity Effects: Increased consumer demand for low-carbon transportation fuels and natural gas could result in new revenue opportunities.	Medium term

Identifier	Likelihood	Magnitude of impact	Potential financial impact	Explanation of financial impact	Strategy to realize opportunity	Cost to realize opportunity	Comment
1	Likely	Low	\$7,000,000	Husky is performing ongoing evaluations to assess the financial impact of this opportunity. Commodity prices of CO2	Husky's Carbon Management Critical Competency Network and corporate carbon management experts advise business units on potential projects for CO2 capture that could support EOR or other markets. As part of this process, support has been provided to submit applications for research and development funding in this	\$20,000,000	Husky's initial pilot for CO2 capture from once-through steam generator flue gas at its Lashburn, Sask. test facility began operation in 2015, capturing up to 30 tonnes a day of

Identifier	Likelihood	Magnitude of impact	Potential financial impact	Explanation of financial impact	Strategy to realize opportunity	Cost to realize opportunity	Comment
2	Likely	Medium	\$889,700,000	<p>for EOR purposes can exceed \$100 per tonne when delivered to remote sites. For example, if CO2 can be captured at \$50 per tonne, it would represent \$7 million in savings, based on 2017 injection volumes of CO2.</p> <p>Husky's proven ability to operate in the harsh offshore environment in the Atlantic region has contributed to an expectation that the Company will recover additional oil over time. In 2017, Husky had gross revenues of \$889.7 million from its Atlantic Operations.</p>	<p>area. In addition, through participation in joint industry projects and conferences, Husky has stayed informed on developing technologies that could improve this feasibility of this opportunity. Through its test facility in Lashburn, Sask., Husky is currently implementing a CO2 capture program for an EOR pilot from once-through steam generators to evaluate technological and economic feasibility of large scale technology adoption and opportunity exploitation.</p> <p>Husky's Atlantic business unit has a robust ice management program that uses a range of resources, including a dedicated surveillance aircraft, and works with various agencies including Environment Canada, the Coast Guard and Canadian Ice Service. Regular surveillance flights usually start in February, and continue until the threat has abated. Husky employs a fleet of vessels to actively manage ice threats. These vessels are equipped with ice management tools including towing ropes, towing nets and water cannons. This fleet has grown over time partly in response to changing ice conditions. Husky works with contractors to mobilize additional resources as needed. In March 2017 an iceberg came within the <i>SeaRose</i> floating, production, storage and offloading (FPSO) vessel's exclusion zone. The Company followed its ice management plan – shutting down production and making preparations to disconnect. However, it did not take the final step of disconnecting. The Company has undertaken steps to further strengthen the plan and to ensure it will be followed in any future situations. It has also improved its iceberg towing capacity and implemented an onshore ice management room, providing for real-time monitoring of operations offshore, and upgraded radar systems to automate the transfer of ice tracking data from offshore installations.</p>	\$5,600,000	<p>CO2e. The project cost approximately \$20 million, with \$6 million provided through external grants.</p> <p>The cost of the Company's ice monitoring and management activities were approximately \$5.6 million in 2017</p>
3	Very likely			If CO2 can be injected	Husky continues to pursue EOR development as part of its	\$30,000,000	In 2017, total operating and capital

Identifier	Likelihood	Magnitude of impact	Potential financial impact	Explanation of financial impact	Strategy to realize opportunity	Cost to realize opportunity	Comment
				successfully and used for Enhanced Oil Recovery, it has potential to increase the recoverable reserves in several heavy oil assets over time.	broader heavy oil business strategy. In 2017, Husky operated CO2 injection EOR pilot tests in five heavy oil pilot areas. The impact to oil production and ultimate oil recovery is being closely monitored. The results of these pilots will determine the commercial feasibility of a large-scale CO2 EOR project.		expenditure in Husky's Lloydminster area heavy oil cyclic solvent injection projects was \$30MM.
4	Very likely	Medium-low	\$1,000,000	Since 2015, when the Fuel Trax system was commissioned, Husky has seen the average daily fuel consumption of its supply fleet reduced by 7%. This translates to a savings of more than \$1,000,000 based on an average fuel price of \$690 per cubic metre.	Husky changed its offshore Atlantic fleet configuration in 2017. The Maersk Dispatcher and Atlantic Osprey were replaced with Atlantic Kingfisher and Skandi Vinland. The Fuel Trax fuel monitoring system is operational on two vessels, the Green Pilot fuel monitoring system is operational on another and manual reporting is utilized on the remaining term charter vessel. Real-time recording of fuel burn has indicated areas where consumption can be reduced. This has resulted in a two-year average daily fleet fuel consumption reduction of 7%.		
5	Likely			The financial implications are difficult to measure at this time. However, these opportunities have the potential to inform Husky's investment decisions. For example, if consumer preference shifts to low-carbon fuels for transportation and natural gas for power generation, Husky may allocate greater resources to these growth areas.	Husky identifies and manages opportunities related to consumer behaviour through several mechanisms: The Company's enterprise risk matrix with mitigation strategies is reviewed by the Audit Committee quarterly and provided to the Board of Directors annually. Through the application of this risk matrix over time, the Company will be able to determine the appropriate response to changing markets as they develop. This includes allocating resources as appropriate to growth opportunities in natural gas, and ethanol-blended gasoline. For example, the Company's Lloydminster Ethanol Plant currently provides low-carbon intensity ethanol to the B.C. market.	\$0	Husky has integrated its risk and opportunity identification processes into everyday business operations at a corporate services level. There are no additional material costs to identify and manage the opportunities described in this response at this time. If any of these opportunities are determined to warrant further study, a formal project sanctioning process would follow with the appropriate decision gates as needed. Costs would be refined at each of these gates.

## Business impact assessment

**(C2.5) Describe where and how the identified risks and opportunities have impacted your business.**

Area	Impact	Description
Products and services	Impacted for some suppliers, facilities, or product lines	Current and emerging clean and renewable fuels regulations have affected costs and markets for blended fuels in Husky's Downstream business. Husky has opportunities related to ethanol produced with lower carbon intensities than specified by regulations due to its CO2 capture facility at its Lloydminster Ethanol Plant. Currently, these regulations are not having a substantive impact on ethanol revenues, but changes in the market for low carbon intensity fuels could increase impact.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	Many of Husky's suppliers have been impacted by the Alberta carbon levy system. Husky has worked with its suppliers to ensure that a fair flow-through of costs related to the levy are incorporated into its agreements. To date, impacts have not been substantive.
Adaptation and mitigation activities	Impacted	Husky's Atlantic business unit has a robust ice management program. The program uses a range of resources, including a dedicated ice surveillance aircraft, and works with government agencies including Environment Canada, the Coast Guard and Canadian Ice Service. Regular ice surveillance flights usually commence in February, and continue until the threat has abated. Atlantic region operators employ a series of supply and support vessels to actively manage ice and icebergs. These vessels are

Area	Impact	Description
		<p>equipped with a variety of ice management tools including towing ropes, towing nets and water cannons. This fleet has grown over time partly in response to changing ice conditions. Husky maintains a series of ad-hoc relationships with contractors, allowing for the quick mobilization of additional resources as required. The cost of the Company's ice monitoring and management activities were approximately \$5.6 million in 2017.</p>
Investment in R&D	Impacted	<p>As part of its efforts to improve the efficiency of getting its bitumen products to market, Husky has proposed a substantive investment in the HDR diluent reduction process that provides for significantly reduced diluent use in transmission pipelines.</p>
Operations	Impacted	<p>Presently, Husky makes non-substantive carbon-related payments in B.C., Ontario and Alberta. These payments totaled \$8,581,951.58 in 2017. This figure was calculated by aggregating total Ontario cap and trade credits purchased for fuel imports, Alberta carbon levy and Specified Gas Emitters Regulation payments that are not passed on to customers and B.C. carbon fees for the Sikanni Gas Plant and Prince George Refinery. The Company's current financial exposure to fees associated with carbon emissions is approximately 0.05% of Husky's 2017 gross revenue before royalties and marketing and other income, and 3% of total Canadian energy input costs. The Company expects payments to increase with pending changes to GHG regulations in various jurisdictions, however there is some uncertainty as to the degree and pace at which increases will be incurred.</p>

## Financial planning assessment

**(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.**

Area	Relevance	Description
Revenues	Impacted for some suppliers, facilities, or product lines	Husky participates in clean and renewable fuels programs in the U.S. and Canada. These programs mandate blending of renewable fuels into marketed fuels at various percentages, depending on jurisdiction. Markets for blendstocks or other compliance options can be volatile, and financial planning for compliance is an important part of mitigating these potentially substantive costs, particularly if Husky is unable to pass these costs on to customers.
Operating costs	Impacted for some suppliers, facilities, or product lines	Presently, Husky makes non-substantive carbon-related payments in B.C., Ontario and Alberta. These payments totaled \$8,581,951.58 in 2017. The Carbon Management Regulatory Monitoring Committee monitors current and emerging regulations and advises management of potential adverse impacts to the Company's financial position and results of operations. The Company's current financial exposure to fees associated with carbon emissions is approximately 0.05% of Husky's 2017 gross revenue before royalties and marketing and other income, and 3% of total Canadian energy input costs. The Company expects payments to increase with pending changes to GHG regulations in various jurisdictions, however there is some uncertainty as to the degree and pace at which increases will be incurred.



Area	Relevance	Description
Capital expenditures/capital allocation	Impacted for some suppliers, facilities, or product lines	In making investment decisions, Husky considers both the cost and value of carbon. Project carbon costs are modelled based on current and emerging policies in any given jurisdiction. Regulatory focus on methane venting management in heavy oil operations has in part led to non-substantive investment in gas conservation infrastructure. In 2017, Husky invested approximately \$1,500,000 in gas compression to capture otherwise vented gases at heavy oil well sites, resulting in an estimated annual savings of greater than \$3,100,000.
Acquisitions and divestments	Impacted for some suppliers, facilities, or product lines	Husky recently completed a disposition program of legacy assets in Western Canada. Part of the process used to evaluate candidate assets for sale was exposure to regulatory risk. This program had a substantive impact on Husky's balance sheet. Altogether, approximately 52,000 boe/day of legacy assets have been sold since late 2015.
Access to capital	Impacted for some suppliers, facilities, or product lines	Investments in low emission technology and energy efficiency often require additional policy incentives including R&D support funding provided by provincial and federal agencies to meet Husky's internal capital allocation criteria. Husky's HDR diluent reduction technology has been awarded substantive financial support through federal R&D funding programs.
Assets	Impacted for some suppliers, facilities, or product lines	Operating costs associated with developing reserves are factored into reserves valuation. These costs can have potentially substantive impacts and can be

Area	Relevance	Description
		<p>affected by market, regulatory and technical risks. In 2017, Husky's natural gas proved reserves were reduced by 9 bcf due to economic factors.</p> <p>Regulations aimed at reducing emissions intensity of production can impact current valuation of assets in relation to their emission intensity.</p>
Liabilities	Impacted for some suppliers, facilities, or product lines	<p>Asset retirement planning can be impacted substantively by increased regulatory focus on venting from abandoned wells. While it is not anticipated that this would impact the total cost of retirement, it can affect the prioritization of projects for remediation and reclamation. In 2017, Husky's estimated total asset retirement obligation was \$9.7 billion.</p>

---

## C3 Business strategy

---

### Business strategy

---

**(C3.1) Are climate-related issues integrated into your business strategy?**

Yes

---

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

Yes, qualitative

---

**(C-CH3.1b/C-OG3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.**

No, we do not have a low-carbon transition plan

---

**(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.**

**i) Description of Internal Process for strategic GHG management:**

Husky uses a GHG management framework to guide the process of integrating climate change into its business strategy. Elements of the GHG management framework that inform corporate business strategy include:

**a. GHG Inventory and Quantification** – Internal processes have been developed to collect and validate data for each Company business unit. Calculation methodologies follow federal, provincial and/or state guidelines for quantifying and reporting emissions using Husky’s Environmental Performance Reporting System (EPRS). The Corporate Responsibility business unit (“Corporate Responsibility”) communicates information requests and calculation results to business units annually.

**b. GHG Reporting and Verification** – Facilities with regulatory reporting and compliance obligations require more detailed communications plans. Corporate Responsibility, along with third-party verifiers as required, develop schedules for meetings, site visits and data validation requests. Results of third-party verification exercises are shared with the facilities to ensure continued awareness of data quality and to streamline reporting processes. Internal Audits are used to ensure completeness and accuracy of the GHG estimation and reporting systems. Facility managers approve GHG reports prior to their submission to regulatory agencies.

**c. Emissions Reduction Strategy** – Facilities with established emission reduction targets (Tucker and Sunrise) are evaluated in conjunction with annual reporting. Opportunities for reductions are proposed and evaluated for feasibility. Any efficiency projects implemented during the previous year are evaluated for effectiveness. Emission forecasts based on projected production provide economic support that may be used to influence future facility design specifications or justify funding for projects to reduce emissions.

**d. Regulatory Policy System** – Corporate Responsibility is actively involved in organizations such as the Canadian Association of Petroleum Producers (CAPP), Canadian Fuels Association (CFA), Plains CO2 Reduction (PCOR) Partnership, International Emissions Trading Association (IETA), IPIECA and Petroleum Technology Alliance of Canada (PTAC) to collaborate with industry peers to address issues related to climate change. Issues affecting Husky’s business units are communicated through appropriate means.

**ii) Examples and description of aspects of climate change that influence business strategy:**

During times of policy change, additional resources are strategically allocated as needed to proactively address regulatory compliance and uncertainty.

As part of its efforts to address regulatory change and stakeholder expectations in relation to climate change, Husky strives to reduce facility emissions through improving energy efficiency, minimizing fugitive emissions and mitigating flaring and venting. Emission reduction and energy efficiency opportunities are evaluated at the facility level. These projects enable Husky to manage emissions reduction obligations and aid in meeting facility intensity targets at its Tucker and Sunrise thermal facilities. Husky pursues offsets as a means to reduce emissions at facilities where GHG reductions are not regulated.

Husky evaluates various ways to reduce the carbon intensity of its Upstream and Downstream operations. The Company uses a Marginal Abatement Cost Curve (MACC) to catalogue options, including the size of emissions reduction possible, as well economic performance. This provides for resource prioritization and reductions at the most efficient cost per-tonne of CO2e. The MACC also helps different areas of the Company share information about emission reduction options.

**iii) Example of the most substantial business decision made related to climate change:**

The most substantial business decision that Husky has made related to climate change continues to be investment in its CO2 Enhanced Oil Recovery program, driven in part by climate-related regulatory changes. Husky’s CO2 EOR program utilizes CO2 emissions captured at the Lloydminster Ethanol Plant, and the Pikes Peak South (formerly Lashburn) thermal project. This program lowers emissions intensity in the Company’s heavy oil business through carbon capture, while enhancing oil production, and creates opportunities for marketing lower carbon intensity products.

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

Climate-related scenarios	Details
Nationally determined	Husky has evaluated its operations in relation to emerging regulations that are based on international commitments. As part of its long-range planning process, the Company developed scenarios based on

contributions (NDCs)	<p>the assumed cost of carbon required to meet Canada’s Nationally Determined Contributions and tested development projects for sensitivity to these prices in the short to medium-term time horizons. These time horizons were chosen based on established guidelines for reserves evaluation. This process was applied to Husky’s Upstream and Downstream Canadian Operations.</p> <p>Results of this analysis were reported to senior management and the Board of Directors and factored into investment decisions.</p>
----------------------	--

---

## C4 Targets and performance

---

### Targets

---

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

Intensity target

---

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

Target reference number	Scope	% emissions in Scope	% reduction from baseline year	Metric	Base year	Start year
	Scope 1	4.67%	20	Metric tonnes CO2e per unit of	2013	2013

Int1				production		
------	--	--	--	------------	--	--

Normalized baseline year emissions covered by target (metric tons CO2e)	Target year	Is this a science-based target?	% achieved (emissions)	Target status	Please explain	% change anticipated in absolute Scope 1+2 emissions	% change anticipated in absolute Scope 3 emissions
0.97	2017	No, and Husky does not anticipate setting one in the next two years	100	Underway	<p>Husky exceeded this target for it's Tucker thermal facility through on-site steam optimization efforts.</p> <p>The baseline emissions intensity (BEI) of the facility is 0.9668 tonnes CO2e per m3 of bitumen produced. The 2017 net emissions intensity limit was 80% of its baseline emissions intensity which amounts to 0.7734 tCO2e/m3 (the target). The facility had a Total Annual Emissions Intensity of 0.581605 tCO2e/m3 in 2017, exceeding the target by 99%.</p> <p>A rolling baseline target is used, so the average of 2011, 2012 and 2013 production was used to calculate baseline absolute emissions. The target outlined is an external target set by regulators and covers Scope 1</p>	92%	0

					<p>emissions only. In Husky's 2017 CDP Climate Response, this target was referenced as target Int2.</p> <p>The figure used in the "% change anticipated in absolute Scope 1+2 emissions" column is based on the anticipated change in absolute emissions that would have been observed if the target was 100% met, based on 2017 production numbers. By exceeding the target, Husky saved 243,844 tCO<sub>2</sub>e of absolute emissions.</p>		
--	--	--	--	--	---	--	--

## Other climate-related targets

**(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.**

Target	KPI – Metric numerator	KPI – Metric denominator (intensity targets only)	Base year	Start year	Target year
Methane reduction target	40-45% of 2012 methane emissions expressed in tonnes CO <sub>2</sub> e	n/a	2012	2016	2025

KPI in baseline year	KPI in target year	% achieved in reporting year	Target Status	Please explain	Part of emissions target	Is this target part of an overarching initiative?
			Underway	Husky is aligning with national and provincial plans to reduce methane emissions by 40-45% of 2012 levels by 2025 as part of its general compliance strategy. In 2017, Husky's methane emissions were 2,289,000 tonnes CO2 equivalent.		No, it's not part of an overarching initiative

---

## Emissions reduction initiatives

---

**(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) Identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tons CO2e (only for rows marked *)



Under investigation	17	
To be implemented*	1	200
Implementation commenced*	1	200
Implemented*	1	627,000
Not to be implemented	0	

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

Activity type	Description of activity	Estimated annual CO2e savings (metric tons CO2e)	Scope	Voluntary/ Mandatory
Fugitive emissions	Oil/natural gas methane	627,000	Scope 1	Mandatory

reductions	leak capture/prevention			
------------	-------------------------	--	--	--

Annual monetary savings (unit currency, as specified in C0.4)	Investment required (unit currency, as specified in C0.4)	Payback period	Estimated lifetime of the initiative	Comment
\$ 3,166,459	\$1,501,668	<1 year	3-5 years	Installation of compressors at heavy oil well sites that will capture otherwise vented produced gas

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

Method	Comment
<ul style="list-style-type: none"> <li>• Compliance with regulatory requirements/standards</li> <li>• Dedicated budget for energy efficiency</li> <li>• Employee engagement</li> <li>• Financial optimization calculations</li> <li>• Internal price on carbon</li> <li>• Internal incentives/recognition programs</li> <li>• Partnering with governments on technology development</li> </ul>	

## Low-carbon products

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

Level of aggregation	Description of product/ Group of products	Are these low-carbon product(s) or do they enable avoided emissions?	Taxonomy, project, or methodology used to classify product(s) as low-carbon or to calculate avoided emissions	% revenue from low-carbon product(s) in the reporting year	Comment
Product	Ethanol	Low carbon product	Other: Natural Resources Canada's GHGenius model	1	Husky has 33 currently approved carbon intensities registered with the B.C. Ministry of Energy and Mines using the GHGenius model to calculate carbon intensities.
Group of products	Gasoline and diesel blends with renewable	Avoided emissions	Other: Natural Resources Canada's GHGenius model	8.27	Scope 1 GHG emissions from transportation fuel combustion were avoided by blending

	fuels			<p>renewable alternatives to gasoline (ethanol) and renewable alternatives to diesel (Hydrogenation-Derived Renewable Diesel [HDRD] and biodiesel) into gasoline and diesel, respectively. Where possible, Husky blends up to 10% ethanol into all grades of gasoline. In 2017, this equated to an average 9.6% ethanol blend, which exceeded federal and provincial requirements at the point of blending (Canada Federal - 5%, BC - 5%, AB - 5%, SK - 7.5%, MB - 8.5%, ON - 5%). In 2017 the blending of ethanol into gasoline resulted in a reduction of 73,138 metric tonnes of CO2 relative to the 2007 baseline. (2007 is the Government of Canada baseline year that takes into account all industry emissions and the fuel offering of that year; it is integrated into the GHG model assumptions.) The most up-to-date version of National Resources Canada's (NRCan) GHGenius model was used to calculate the carbon intensities of Husky's fuel blends. The B.C. Renewable and Low Carbon Fuel Requirements Regulation's Emissions Calculation was used to determine emissions reductions. Emissions Reduction (tonnes) = (CI class x EER fuel - CI fuel) x EC fuel / 1,000,000, where CI class = the prescribed carbon intensity limit for the compliance period for the class of fuel of which the fuel is a part; EER fuel = the prescribed energy effectiveness ratio for that fuel in that class of fuel; CI fuel = the carbon intensity of the fuel (via GHGenius); EC fuel = the energy content of the fuel calculated in accordance with the regulations. Husky is not</p>
--	-------	--	--	---

					<p>considering generating Certified Emission Reductions (CERs) or Emission Reduction Units (ERUs) within the framework of Clean Development Mechanism (CDM) or Joint Implementation (JI) of the United Nations Framework Convention on Climate Change (UNFCCC) at this time.</p> <p>For biodiesel and HDRD, the 2017 blend resulted in an average of 2.8% renewables for our Canadian supply of diesel to the market.</p> <p>In 2017, the blending of biodiesel and HDRD resulted in a reduction of 63,144 metric tonnes of CO2 relative to the 2007 baseline.</p> <p>Total emissions avoided through biofuel blending amounted to 136,281 metric tonnes of CO2 in 2017.</p>
--	--	--	--	--	--

---

## Methane reduction efforts

---

**(C-OG4.6) Describe your organization’s efforts to reduce methane emissions from oil and gas production activities.**

Husky continues engagement with regulators in order to contribute to the development of voluntary and mandatory methane emission reduction programs to meet federal and provincial targets.

Husky has worked towards reducing methane emissions as per the following items.

- Increased understanding and focus on gas production (calculated via GOR) and the implications on emissions.
- Increased understanding and focus on gas management strategies.
- Developing new ways to reduce vent besides conventional conservation (pipeline and compressor).

- Added enclosed combustors as gas management reduction tool. No significant impact to date, but step-change reductions are anticipated once regulators simplify reduced spacing process.
  - Developing processes and tools to help focus on proactive/leading indicators to resolve potential vent issues before they become a regulatory concern.
- In 2017, Husky installed compressors at heavy oil well sites that will capture otherwise vented produced gas, generating an estimated savings of more than 627,000 tonnes CO<sub>2</sub>e.
- 

## Leak detection and repair

---

**(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) 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.**

Husky meets or exceeds regulatory compliance requirements for monitoring and reporting to effectively address risk. Prescriptive programs are in place at Company facilities for leak detection and repair of fugitive emission sources. Alberta, Saskatchewan, and British Columbia regulations prioritize targeted facilities that are generally defined by licence type, size, throughput, or qualitative observations. Monitoring frequencies are generally flexible and variable with an annual baseline frequency. Methodologies used included infrared cameras, hand held gas detectors, soapy water investigations on point sources, toxic/organic vapour analyzers, photo ionization detector, ultrasound probe, or third-party evaluation or other justifiable and defensible methods.

For example, Husky's LDAR program at its Canadian Downstream facilities includes the survey of the natural gas and refinery fuel gas lines to identify leaking equipment components, repair the leaks, re-monitor the repaired leak sources, and quantify and report fugitive methane emissions from equipment leaks. Husky conducts semi-annual LDAR surveys of its Lloydminster thermal assets. These surveys utilize infrared and ultrasonic detection to identify leaks in real time. Maintenance personnel accompany leak detection staff to perform repairs as leaks are discovered, wherever possible.

---

## Flaring reduction efforts

---

**(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.**

Regulations in Alberta and Saskatchewan mandate both operational and economic evaluations that prioritize collection and conservation of produced gas over flaring. In addition, Husky engages in voluntary and collaborative efforts with government and industry organizations to reduce flaring through application of technology and sharing of knowledge and experience. Husky is also piloting closed combustors as an alternative to flaring, providing for a more controlled combustion of waste gases where gas conservation is not a viable solution. In Husky's Atlantic region business unit, Husky proposes targets for flaring volumes with the regulator and is then required to stay within those limits. These targets are approved for the period beginning April 1 and ending March 31 of the following year. For 2016-2017, the approved flare limit was 63.46 million m<sup>3</sup> and Husky flared approximately 57.3 million m<sup>3</sup>, staying 9.7% below the target.

---

---

## C5 Emissions methodology

---

### Base year emissions

---

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

Scope	Base year start	Base year end	Base year emissions (metric tons CO <sub>2</sub> e)	Comment
-------	-----------------	---------------	--	---------

Scope 1	01/01/2011	31/12/2011	9,750,000	Due to significant divestitures and acquisitions during 2016 and 2017, Husky is adjusting its baseline emissions to reflect the changed asset mix.
Scope 2 (location-based)	01/01/2011	31/12/2011	1,940,000	Due to significant divestitures and acquisitions during 2016 and 2017, Husky is adjusting its baseline emissions to reflect the changed asset mix.
Scope 2 (market-based)				Per CDP guidance, the location-based result has been used as a proxy since a market-based figure cannot be calculated.

---

## Emissions methodology

---



**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.**

- Canadian Association of Petroleum Producers, Calculating Greenhouse Gas Emissions, 2003
  - IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2003
  - ISO 14064-1
  - The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
  - US EPA Climate Leaders: Indirect Emissions from Purchases/ Sales of Electricity and Steam
  - US EPA Climate Leaders: Direct Emissions from Stationary Combustion
  - US EPA Mandatory Greenhouse Gas Reporting Rule
  - Other, please specify
- 

**(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.**

**Question dependencies**

This question only appears if you select “Other, please specify” in response to C5.2.

Environment and Climate Change Canada: Technical Guidance on Reporting Greenhouse Gas Emissions – 2017 Data - Facility Greenhouse Gas Emissions Reporting (March 2018); Western Climate Initiative: Quantification Method 2013 Addendum to Canadian Harmonization Version (December 20, 2013); Western Climate Initiative: Final Essential Requirements of Mandatory Reporting - 2011 Amendments for Harmonization of Reporting in Canadian Jurisdictions (December 21, 2011, as amended on February 10, 2012); and Western Climate Initiative: Final Essential Requirements of Mandatory Reporting - 2010 Amended for Canadian Harmonization (December 17, 2010).

---

---

## **C6 Emissions data**

---

## Scope 1 emissions data

---

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

Gross global Scope 1 emissions (metric tons CO2e)	Comment
11,180,000	

---

## Scope 2 emissions reporting

---

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

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We are reporting a Scope 2, market-based figure	Husky uses green-e residual mix emissions factors for the regions where it has operations that acquire and consume electricity to report a Scope 2, market based figure, per CDP guidance. These factors are significantly lower than the emissions factors generated from National Inventory Reporting and local electricity system operator data used to report location based Scope 2 emissions, due to their large regional coverage.

---

## Scope 2 emissions data

---

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

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
2,221,000	1,311,000	Electricity emissions factors for location-based Scope 2 accounting are taken from the 2016 Canadian National Inventory Report as submitted to the United Nations Framework Convention on Climate Change or supplied by grid operators where available. Market-based figures are calculated using green-e residual mix electricity emission factors as recommended by CDP. Husky has a power purchase agreement in place for its Rainbow Lake gas plant. The source specific emission factor was not available for 2017 due to plant maintenance activities, so the default regional emissions factors were used.

---

## Exclusions

---

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

Yes

---

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

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why this source is excluded
Drilling and Completions Emissions from areas where not mandated.	Emissions are not relevant	Emissions are not relevant	Emissions are not relevant	Drilling and completions operations emissions are only estimated and reported in jurisdictions where mandated. Drilling and completions emissions from Husky's Atlantic region offshore drilling operations are included.
Emissions from Husky owned and operated vehicles that are operated outside of specific large-emitting facilities	Emissions are not relevant	Emissions are not relevant	Emissions are not relevant	Husky estimates that this is not a major emissions source at this time.
Emissions from some Husky-owned transportation fuels retail sites, i.e. bulk plants, travel centres, cardlocks and retail stations	Emissions are not relevant	Emissions are not relevant	Emissions are not relevant	Husky includes retail site Scope 2 emissions data where available (primarily in Alberta and Saskatchewan). Based on sampling of those retail sites with available emissions data, Husky estimates that emissions from building heating and electricity consumption from sites where data is unavailable are immaterial when compared to the

Scope 2 emissions related to November 2017 acquisition of Superior Refinery	No emissions excluded	Emissions excluded due to a recent acquisition	Emissions excluded due to a recent acquisition	Company's total Scope 1 and Scope 2 emissions.  In November 2017, Husky acquired the Superior Refinery. Due to the timing of this acquisition, scope 2 emissions estimates are not available at the time of this disclosure.
---	-----------------------	--	--	--

## Scope 3 emissions data

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

Sources of Scope 3 emissions	Evaluation status	Metric tons CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Not relevant, explanation provided				This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.
					This source of Scope 3 GHG

Sources of Scope 3 emissions	Evaluation status	Metric tons CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Capital goods	Not relevant, explanation provided				emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not relevant, explanation provided				This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.
Upstream transportation and distribution	Not relevant, explanation provided				This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.
Waste generated	Not relevant,				This source of Scope 3 GHG emissions is not material when

Sources of Scope 3 emissions	Evaluation status	Metric tons CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
in operations	explanation provided				compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.
Business travel	Not relevant, explanation provided				This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.
Employee commuting	Not relevant, explanation provided				This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.
Upstream leased assets	Not relevant, explanation provided				This source of Scope 3 GHG emissions is not material when compared against the emissions

Sources of Scope 3 emissions	Evaluation status	Metric tons CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Downstream transportation and distribution	Not relevant, explanation provided				<p>related to the end-use combustion and / or oxidation of the products sold by Husky.</p> <p>This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.</p>
Processing of sold products	Not relevant, explanation provided				<p>This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.</p>
Use of sold products	Relevant, calculated	30,906,000	Emission factors are from EPA 40 CFR part	0	Data is only provided where there is a regulatory requirement to disclose end use of sold product emissions. This



Sources of Scope 3 emissions	Evaluation status	Metric tons CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
End of life treatment of sold products	Not relevant, explanation provided		98 subpart MM regulation.		includes only Husky's Downstream assets in the U.S.  This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.
Downstream leased assets	Not relevant, explanation provided				This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.
Franchises	Not relevant, explanation provided				This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold

Sources of Scope 3 emissions	Evaluation status	Metric tons CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					by Husky.
Investments	Not relevant, explanation provided				This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.

---

## Emissions from biologically sequestered carbon

---

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

Yes

---

**(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.**

221,000

---

## Emissions intensities

**(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	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change	Reason for change
0.000721	13,401,000	Unit total revenue	18,583,000,000	Location-based	30.7%	Decreased	The oil price environment significantly improved in 2017, leading to improved revenues, alongside increased production and throughput. Gross global combined S1 and S2 emissions increased slightly in 2017, primarily due to increased thermal production and refining throughput, better fugitive emissions data quality, and the acquisition of the Superior Refinery. This was offset by a combination of changes in

							output, asset dispositions, refinement of emissions estimation methodologies based on improved engine fleet data, and methane venting reduction programs in Western Canada, resulting in a greater proportional change in revenue.
--	--	--	--	--	--	--	--

## Emissions intensities: Oil and gas

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

Unit of hydrocarbon category (denominator)	Metric tons CO2e from hydrocarbon category per unit specified	% change from previous year	Direction of change	Reason for change	Comment
Thousand barrels of crude oil / condensate	71.71	18	Decreased	Investment in gas conservation infrastructure, natural production declines, divestment	
Thousand barrels of	85.13	3	Increased	Facilities that	

oil sands (includes bitumen and synthetic crude)				commenced operations midway during the 2016 year are continuing to normalize steam operations towards steady operating conditions.	
Million cubic feet of natural gas	2.95	47	Decreased	Divestment	
Thousand barrels of refinery throughput	28.90	8	Increased	Acquisition of the Superior Refinery and increased throughput at the Lima Refinery.	

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

Oil and gas business division	Estimated total methane emitted expressed as % of natural gas production or throughput at given division	Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division	Comment
Upstream	2.63%		

		0.301%	
Downstream	0%	0.034%	Husky classifies all gas assets as upstream.

---

## C7 Emissions breakdown

---

### Scope 1 breakdown: GHGs

---

**(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?**

Yes

---

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

Greenhouse gas	Scope 1 emissions (metric tons in CO2e)	GWP Reference
CO2	8,649,000	IPCC Fourth Assessment Report (AR4 - 100 year)

CH4	2,289,000	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	242,000	IPCC Fourth Assessment Report (AR4 - 100 year)

**(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	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Total gross Scope 1 GHG emissions (metric tons CO2e)	Comment
Fugitives (Oil: Total)	333,000	81,000	2,364,000	
Fugitives (Oil: Venting)	158,000	75,000	2,040,000	
Fugitives (Oil: Flaring)	176,000	1,200	206,000	
Fugitives (Oil: E&P,	14	4,700	118,000	

Emissions category	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Total gross Scope 1 GHG emissions (metric tons CO2e)	Comment
excluding venting and flaring)				
Fugitives (Oil: All other)	0	0	0	
Fugitives (Gas: Total)	15,000	3,700	107,000	
Fugitives (Gas: Venting)	680	790	20,000	
Fugitives (Gas: Flaring)	14,000	79	16,000	
Fugitives (Gas: E&P, excluding venting and flaring)	85	2,800	70,000	
Fugitives (Gas: Midstream)	0	0	0	



Emissions category	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Total gross Scope 1 GHG emissions (metric tons CO2e)	Comment
Fugitives (Gas: All other)	0	0	0	
Combustion (Oil: Upstream, excluding flaring)	4,683,000	1,300	4,732,000	
Combustion (Gas: Upstream, excluding flaring)	345,000	1,200	378,000	
Combustion (Refining)	1,916,000	290	2,075,000	
Combustion (Chemicals production)	112,000	2	113,000	
Combustion (Electricity generation)	243,000	17	255,000	

Emissions category	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Total gross Scope 1 GHG emissions (metric tons CO2e)	Comment
Combustion (Other)	0	0	0	
Process emissions	456,000	1,300	545,000	
Emissions not elsewhere classified	546,000	2,600	611,000	

---

## Scope 1 breakdown: country

---

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Canada	9,232,000
United States of America	1,948,000

---

## Scope 1 breakdown: business breakdown

---

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

- By business division
  - By facility
  - By activity (not applicable for companies responding to sector questionnaires)
- 

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

Business division	Scope 1 emissions (metric tons CO2e)
Upstream	7,837,000
Downstream	3,343,000

---

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

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Sunrise Energy Project	1,580,000	57.24150	-111.06000
Lima Refinery	1,428,000	40.72132	-84.11410
Lloydminster Upgrader	1,041,000	53.26300	-109.94900

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Tucker Thermal Project	740,000	54.34270	-110.32900
Superior Refinery	520,000	46.69055	-92.07095
Bolney Lloyd Thermal Project	499,000	53.52700	-109.35700
Sea Rose FPSO	418,000	46.72150	-48.13410
Pikes Peak South Lloyd Thermal Project	270,000	53.21062	-109.36700
Edam East Lloyd Thermal Project	256,000	53.15615	-108.92100
Vawn Lloyd Thermal Project	237,000	53.11599	-108.64100
Rush Lake Lloyd Thermal Project	226,000	53.11350	-108.99600
Pikes Peak Lloyd Thermal Project	220,000	53.27960	-109.37200
Prince George Refinery	144,000	53.92680	-122.70300
Paradise Hill Lloyd Thermal Project	124,000	53.60230	-109.44800
Edam West Lloyd Thermal Project	118,000	53.15613	-108.92063
Sandall Lloyd Thermal Project	115,000	53.40071	-109.43700
Rainbow Lake Gas Plant	96,000	58.45067	-119.23800

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Lloydminster Refinery	89,000	53.28850	-110.01800
Minnedosa Ethanol Plant	77,000	50.25430	-99.84980
All other Husky Operated Facilities	2,982,000		

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

Activity	Scope 1 emissions (metric tons CO2e)
Canadian Refining and Upgrading	1,282,000
Conventional Oil	2,520,000
Drilling and Completions	29,000
Ethanol Production	113,000
Gas Production, Gathering and Processing	486,000
Offshore Oil Production	418,000
Thermal Oil Production	4,384,000
US Refining	1,948,000

## Scope 1 breakdown: sector production activities

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

Sector production activity	Gross Scope 1 emissions, metric tons CO2e	Comment
Chemicals production activities**	113,000	
Oil and gas production activities (upstream)**	7,837,000	
Oil and gas production activities (downstream)**	3,230,000	

\*This column only appears for cement production activities

\*\*This row only appears for the relevant sector

## Scope 2 breakdown: country

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling	Purchased and consumed low-carbon electricity, heat, steam or
----------------	--	--	--	---

			(MWh)	cooling accounted in market-based approach (MWh)
Canada	1,593,000	821,000	2,991,000	0
United States of America	628,000	489,000	1,065,000	0

---

## Scope 2 breakdown: business breakdowns

---

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

- By facility
- By activity

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

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Lima Refinery	628,000	489,000
Lloydminster Upgrader	425,000	292,000
Sunrise Energy Project	212,000	90,000
Rainbow Lake Gas Plant	162,000	69,000
Lloydminster Ethanol Plant	111,000	88,000

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Tucker Thermal Project	74,000	31,000
Bolney Lloyd Thermal Project	55,000	18,000
Lloydminster Pipeline Terminal	42,000	18,000
Pikes Peak South Lloyd Thermal Project	27,000	9,000
Vawn Lloyd Thermal Project	27,000	9,000
Edam West Thermal Plant	27,000	9,000
Edam East Lloyd Thermal Project	26,000	9,000
Rush Lake Lloyd Thermal Project	25,000	8,000
Cold Lake Pipeline Terminal	24,000	10,000
Hardisty Pipeline Terminal	24,000	10,000
Lloydminster Refinery	20,000	9,000
Pikes Peak Lloyd Thermal Project	19,000	6,000
Sandall Lloyd Thermal Project	14,000	5,000
Paradise Hill Lloyd Thermal Project	12,000	4,000
All other Husky Operated Facilities	267,000	128,000

---

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



Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Canadian Refining and Upgrading	564,000	366,000
Conventional Oil Production	161,000	60,000
U.S. Refining	628,000	489,000
Gas Production, Gathering, and Processing	235,000	100,000
Thermal Oil Production	519,000	198,000
Other Upstream Operations	3,000	1,000
Ethanol Production	111,000	97,000

---

## Scope 2 breakdown: sector production activities

---

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

Sector production activity	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Chemicals production activities*	112,000	97,000	
Oil and gas production activities			

(upstream)*	918,000	359,000	
Oil and gas production activities (downstream)*	1,191,000	855,000	

---

## Emissions performance

---

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

Reason	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy	0	No change	0	Husky had no material energy consumption from renewable sources in 2017.

Reason	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
consumption				
Other emissions reduction activities	628,000	Decreased	4.7%	In 2017 Husky installed compressors at heavy oil well sites that capture otherwise vented produced gas. The Company estimates anticipated savings of 628,000 tonnes of CO2e per year as a result of this project. Husky's total combined S1 and S2 emissions in 2016 were 13,370,000 tonnes CO2e. Thus $628,000 / 13,370,000 * 100 = 4.7\%$ .
Divestment	848,000	Decreased	6.3%	In 2017 Husky divested a significant portion of its Western Canadian conventional assets, including the Ram River gas plant. This resulted in a 848,000 tCO2e decline in the Company's emissions from conventional and gas assets. Husky's total combined S1 and S2 emissions in 2016 were 13,370,000 tonnes CO2e. Thus $848,000 / 13,370,000 * 100 = 6.3\%$ .
Acquisitions	520,000	Increased	3.9%	In November 2017 Husky acquired the Superior Refinery. This resulted in a 520,000 tCO2e increase in the Company's Scope 1 emissions from its U.S. refining assets. Due to the timing of the acquisition, Husky does not have 2017 Scope 2 emissions estimates for the Superior Refinery at the time of this disclosure. Husky's total combined S1 and

Reason	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
				S2 emissions in 2016 were 13,370,000 tonnes CO2e. Thus $520,000 / 13,370,000 * 100 = 3.9\%$ .
Change in output	1,014,000	Increased	7.6%	Increased production at the Company's thermal facilities (Sunrise, Tucker, Edam East and Edam West, Rush Lake, Vawn) accounted for an increase of over 832,000 tonnes CO2e in 2017. Further increases in throughput at the Lima Refinery accounted for an additional increase of 382,000 tonnes CO2e in 2017. These increases were partially offset by reductions due to decreased throughput at the Lloydminster Upgrader due to a major turnaround in 2017, as well as natural declines in conventional oil production. The net change was approximately 1.01 million tonne increase in CO2e. Husky's total combined S1 and S2 emissions in 2016 were 13,370,000 tonnes CO2e. Thus $1,014,000 / 13,370,000 * 100 = 7.6\%$ .

**(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

---

### Energy spend

---

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

More than 15% but less than or equal to 20%

---

### Energy-related activities

---

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

Activity	Indicate whether your organization undertakes this energy-related activity
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	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

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

Activity	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	39,140,000	39,140,000
Consumption of purchased or acquired electricity	N/A	0	2,272,000	2,272,000
Consumption of purchased or acquired steam	N/A	0	1,784,000	1,784,000

Consumption of self-generated non-fuel renewable energy	N/A	0	N/A	0
Total energy consumption	N/A	0	43,196,000	43,196,000

**(C-CH8.2a) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.**

Activity	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	623,000
Consumption of purchased or acquired electricity	N/A	86,000
Consumption of purchased or acquired steam	N/A	336,000

Consumption of self-generated non-fuel renewable energy	N/A	0
Total energy consumption	N/A	1,045,000

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

Fuel application	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of	No



Consumption of fuel for co-generation or tri-generation	No
---	----

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

Identifier	Fuels	Heating value	Total MWh consumed by the organization	MWh consumed for self-generation of electricity
1	Natural gas	HHV	30,267,000	1,294,000
2	Refinery gas	HHV	8,675,000	0
3	Diesel	HHV	122,000	0
4	Marine Gas Oil	HHV	63,000	17,000
5	Liquid Propane	HHV	13,000	0

Identifier	MWh consumed for self-generation of heat	MWh consumed for self-generation of steam	MWh consumed for self-generation of cooling	MWh consumed self-cogeneration or self-trigeneration
1	0	20,414,000	0	0
2	0	0	0	0

3	0	0	0	0
4	0	0	0	0
5	0	0	0	0

**(C8.2d) List the average emission factors of the fuels reported in C8.2c.**

Fuel	Emission factor	Unit	Emission factor source	Comment
Natural gas	2436	kg CO2e per MWh	This figure is a calculated average of all combustion emissions Husky has classified as Natural Gas. Emissions from natural gas combustion are calculated using analyzed gas samples that are assigned to emissions inventories at the equipment level.	Husky includes both marketable and non-marketable gas in its natural gas fuel category for the purposes of this response.
Refinery gas	1743	kg CO2e per MWh	This figure is a calculated average of all combustion emissions Husky has classified as Refinery Gas. Emissions from refinery	Husky includes all refinery gases that are not natural gas or propane as part of this fuel category for the purposes of this response.

			gas combustion are calculated using analyzed gas samples that are assigned to emissions inventories at the equipment level.	
Diesel	2688	kg CO2 per m3	API Compendium Table 4.1	
Marine gas oil	2615	kg CO2 per m3	US EPA AP42 Table 3.1-2a	
Liquid Propane	1500	kg CO2 per m3	US EPA AP42 Table 1.5-1	

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

Energy Carrier	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	1,311,000	1,311,000	0	0

Heat	0	0	0	0
Steam	20,414,000	20,414,000	0	0
Cooling	0	0	0	0

**(C-CH8.2e) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.**

Energy Carrier	Total gross generation (MWh) inside chemicals sector boundary	Generation that is consumed (MWh) inside chemicals sector boundary
Electricity	0	0
Heat	0	0

Steam	0	0
Cooling	0	0

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

Basis for applying a low-carbon emission factor	Low-carbon technology type	MWh consumed associated with low-carbon electricity, heat, steam or cooling	Emission factor (in units of metric tons CO2e per MWh)	Comment
No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor				

## Feedstock consumption: Chemicals

**(C-CH8.3) Disclose details on your organization's consumption of feedstocks for chemical production activities.**

Feedstocks	Total	Total	Inherent carbon	Heating value of	Heating value	Comment
------------	-------	-------	-----------------	------------------	---------------	---------

	consumption	consumption unit	dioxide emission factor of feedstock, metric tons CO2 per consumption unit	feedstock, MWh per consumption unit		
Solid biomass	744,145	Metric tons	Not applicable for fermentation CO2 emissions associated with ethanol production	Not applicable	Not applicable	

---

**(C-CH8.3a) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.**

Feedstock source	Percentage of total chemical feedstock (%)
Oil	0
Natural Gas	0

Coal	0
Biomass	100
Waste	0
Fossil fuel (where coal, gas, oil cannot be distinguished)	0
Unknown source or unable to disaggregate	0

---

---

## C9 Additional metrics

---

### Oil and gas production

---

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

Hydrocarbon category	In-year net production	Comment
Crude oil and condensate, million barrels	34.9	From 2017 Form 40-F: reconciliation of Proved Reserves (p. 36)
Natural gas liquids, million barrels	6.6	From 2017 Form 40-F: reconciliation of Proved Reserves (p. 36)
Oil sands, million barrels (includes bitumen and synthetic crude)	43.6	From 2017 Form 40-F: reconciliation of Proved Reserves (p. 36)
Natural gas, billion cubic feet	196.8	From 2017 Form 40-F: reconciliation of Proved Reserves (p. 36)

---

### Oil and gas reserves methodology

---



**(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.**

Husky's oil and gas reserves are estimated in accordance with the standards contained in the COGEH, and the reserves data disclosed conforms with the requirements of National Instrument 51-101 "Standards of Disclosure for Oil and Gas Activities" ("NI 51-101"). All of Husky's oil and gas reserves are prepared by internal reserves evaluation staff using a formalized process for determining, approving and booking reserves. This process requires all reserves evaluations to be done on a consistent basis using established definitions and guidelines. Approval of individually significant reserves changes requires review by an internal panel of expert geoscientists and qualified reserves evaluators. The Audit Committee of the Board of Directors has examined Husky's procedures for assembling and reporting reserves data and other information associated with oil and gas activities and has reviewed that information with management. The Board of Directors has approved, on the recommendation of the Audit Committee, the content of Husky's disclosure of its reserves data and other oil and gas information. The reserves in C-OG9.2 are Husky's gross reserves, which are the working interest share of reserves before deduction of royalties and without including any royalty interests.

---

## Oil and gas total reserves

---

**(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)
2436.8		

---

## Oil and gas reserves split

---

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

Hydrocarbon category	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)
Crude oil / condensate / Natural gas liquids	16		
Natural gas	18		
Oil sands (includes bitumen and synthetic crude)	66		

---

## Oil and gas split by development type

---

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

Development type	In-year net production (%)	Net proved reserves (1P) (%)	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Other: Light & Medium Crude Oil	16%	9 %	9%			

Other: Heavy Crude Oil	14%	5%	4%			
Other: Bitumen	37%	57%	66%			
Other: Conventional Natural Gas	28%	24%	18%			
Other: Natural Gas Liquids	5%	5%	3%			

**Comment:**

The information included in the response to C-OG9.2e is prepared directly from Husky's oil and gas reserves disclosure, dated March 1, 2018, in the Company's 2017 Annual Information Form, as filed on SEDAR and available on Husky's website "www.huskyenergy.com". Husky prepares reserves information in accordance with National Instrument 51 - 101 Standards of Disclosure for Oil and Gas Activities ("NI 51-101"). NI 51-101 has specific requirements for classifying oil and gas reserves by product type. The product types selected in response to this question are in accordance with NI 51-101. Husky does not publicly disclose contingent resources (which would require disclosure of additional items as set out in NI 51-101), accordingly, Husky has not disclosed information regarding contingent resources in the format requested by CDP.

---

## Chemicals production metrics

---

**(C-CH9.3a) Provide details on your organization's chemical products.**

Output product	Production (metric tons)	Capacity (metric tons)	Direct emissions intensity	Electricity intensity (MWh per metric ton)	Steam intensity (MWh per metric ton)	Steam/ heat recovered (MWh per	Comment
----------------	--------------------------	------------------------	----------------------------	--	--------------------------------------	--------------------------------	---------

			(metric tons CO2e per metric ton of product)	of product)	of product)	metric ton of product)	
Ethanol	232,000	205,000	0.49	0.37	2.37	0	

---

## Total refinery throughput

---

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

Total refinery throughput capacity (Thousand barrels per day)
284.2

---

## Feedstocks used in refinery

---

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

Feedstock	Throughput (Millions barrels)	Comment
	103.7	Throughput information is from the 2017

Oil		Annual Report. Canadian refining and upgrading throughput of 106.5 mbbbls/day U.S. refining throughput of 177.7 mbbbls/day Total operated throughput of 284.2 mbbbls/day * 365 days / 1000 = 103.7
Other feedstocks	1.36	Natural gas is used as feedstock for hydrogen production through steam methane reforming (SMR). Hydrogen is required for hydrotreating and hydrocracking as an integral part of the upgrading and refining operations.  8,169 MMscf total natural gas used as SMR feedstock at Husky Downstream facilities / 6,000 MMscf/MMBOE = 1.36 MMBOE
Total	105.06	

---

## Refinery products and net production

---

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

No

---

## Low-carbon investments: Coal / Electric utilities / Oil & gas

---

**(C-OG9.6) Disclose your investments in low-carbon research and development (R&D), equipment, products, and services.**

Investment start date	Investment end date	Investment area	Technology area	Investment maturity	Investment figure	Low-carbon investment percentage	Please explain
2016-01-01	2016-12-31	R&D	Other, please specify	Applied research and development	\$157,756.29	100%	Technology area: HDR technology development for partial upgrading to reduce diluent usage. Cash payment by Proponent after funding contributions
2017-01-01	2017-12-31	R&D	Other, please specify	Applied research and development	\$157,756.28	100%	Technology area: HDR partial upgrading grant funding received and deferred cash contribution
2018-01-01	2018-12-31	Property, Plant and Equipment	Other, please specify	Pilot demonstration	\$1,183,000	12%	Technology area: HDR partial upgrading: forecast equipment and products

Investment start date	Investment end date	Investment area	Technology area	Investment maturity	Investment figure	Low-carbon investment percentage	Please explain
2018-01-01	2018-12-31	Services	Other, please specify	Pilot demonstration	\$ 8,699,000	88%	Technology area: HDR partial upgrading: salaries, services, overhead, travel, other

---

## Breakeven price (US\$/BOE)

---

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

\$50

---

## Transfers & sequestration of CO2 emissions

---

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

Yes

---

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

Transfer direction	CO2 transferred – reporting year (metric tons CO2)
CO2 transferred in	50,153
CO2 transferred out	0

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

Injection and storage pathway	Injected CO2(metric tons CO2)	Percentage of injected CO2 intended for long-term (>100 year) storage	Year in which injection began	Cumulative CO2 injected and stored (metric tons CO2)
CO2 used for enhanced oil recovery (EOR) or enhanced gas recovery (EGR)	116,839	0	2008	545,839

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

Husky injects CO2 into several reservoirs in the Lloydminster area of Saskatchewan for the purposes of enhanced oil recovery.



# C10 Verification

## Verification

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

Scope	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	No third-party verification or assurance

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

Scope	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported emissions verified (%)

Scope	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported emissions verified (%)
Scope 1	Annual process	Complete	Limited assurance	2017 Husky Energy Sustainability Assurance Engagement Letter	Husky 2018 ESG report: Independent Limited Assurance Report - page 41 & 42	ISAE3000	100
Scope 2 location based	Annual process	Complete	Limited assurance	2017 Husky Energy Sustainability Assurance Engagement Letter	Husky 2018 ESG report: Independent Limited Assurance Report - page 41 & 42	ISAE3000	100

---

## Other verified data

---

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

Yes

---

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

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Progress against emissions reduction target	ISO14064-3	For facilities that are governed by the Alberta Specified Gas Emitters Regulation, verification work is in relation to a baseline year for the purposes of evaluating progress towards emissions reduction obligations.

---

# C11 Carbon pricing

---

## Carbon pricing systems

---

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

- Alberta carbon tax
  - Alberta SGER
  - BC carbon tax
  - Ontario CaT
- 

**(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.**

System name	% of Scope 1 emissions covered by the ETS	Period start date	Period end date
Alberta SGER	20.8%	01/01/2017	31/12/2017
ON CaT	0%	01/01/2017	31/12/2017

Allowances allocated	Allowances purchased	Verified emissions in metric tons CO <sub>2</sub> e	Details of ownership	Comment
2,512,540	0	2,319,559.88	Other: Operated and owned outright or jointly	Husky's Sunrise and Tucker thermal facilities participate in the Alberta SGER. Neither facility had a compliance obligation in 2017. Sunrise was undergoing baseline emissions monitoring and Tucker exceeded its SGER target.
0	181,000	0	Other: Operated and owned outright or jointly	Husky purchased Ontario cap and trade allowances for fuel that was imported into the province for sale at its fuel outlets in 2017.

(C11.1c) Complete the following table for each of the tax systems in which you participate.

Pricing system	Period start date	Period end date	% of emissions covered by tax	Total cost of tax paid	Comment
Alberta Carbon Tax	01/01/2017	31/12/2017	0.83%	\$1,827,681.58	

BC Carbon Tax	01/01/2017	31/12/2017	1.07%	\$3,200,000	
---------------	------------	------------	-------	-------------	--

**(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?**

Husky seeks to reduce emissions at its facilities through improved energy and emissions management and offsets the balance of compliance obligations through the use of emissions performance credits, purchases of project based carbon offsets, and purchases of Climate Change Emissions Management Fund credits. For example, at the Tucker thermal facility, Husky was able to exceed its 2017 compliance target by 99% through the optimization of steam systems.

**Project-based carbon credits**

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

Yes

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

Credit origination or credit purchase	Project type	Project identification	Verified to which standard
Credit origination	Methane avoidance	Cap-Op Energy Emission Reductions from Pneumatic Devices (Pool B)	Other: Project verified to Reasonable level assurance, ISO 14064-3 and the following standards:

			<ul style="list-style-type: none"> <li>- Climate Change and Emissions Management Act</li> <li>• Carbon Competitiveness Incentive Regulation (255/2017)</li> <li>• Standard for Greenhouse Gas Emission Offset Project Developers, Version 1.0, December 2017</li> <li>• Standard for Verification, Version 1.0, December 2017</li> <li>• Quantification Protocol for Greenhouse Gas Emission Reductions from Pneumatic Devices, Version 2.0, January 2017. Purpose: compliance mechanisms</li> </ul>
Credit origination	Energy efficiency: industry	Husky Oil Operations (Tucker thermal project)	Other: Credits verified to reasonable level assurance, ISO 14064-3 and Specified Gas Emitters Regulation (139/2017)

Number of credits (metric tons CO2e)	Number of credits (metric tons CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
14647	14647	No	Compliance
252241	252241	No	Compliance

## Internal price on carbon

---

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

Yes

---

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

Objective for implementing an internal carbon price	GHG Scope	Application	Actual price(s) used (Currency /metric ton)	Variance of price(s) used	Type of internal carbon price	Impact & implication
<ul style="list-style-type: none"> <li>• Navigate GHG regulations</li> <li>• Stakeholder expectations</li> <li>• Change internal behavior</li> <li>• Drive energy efficiency</li> <li>• Stress test investments</li> </ul>	<ul style="list-style-type: none"> <li>• Scope 1</li> </ul>	Upstream and Downstream Canadian operations	50	Husky employs a geographically differentiated shadow price that is sensitive to the realistic pricing assumptions of each jurisdiction in which it operates. For Canada, this results in an evolutionary pricing model that is based on the proposed Pan-	Shadow price	Husky uses an internal price on carbon to evaluate projects in jurisdictions where there is a regulatory compliance obligation for GHG emissions or where there is a reasonable expectation that additional material compliance



				<p>Canadian Climate Framework, which calls for annual escalating prices approaching \$50/tonne by 2022. The starting point for this pricing varies by province based on the carbon pricing regulations currently in place.</p>		<p>obligations will be implemented in the near to mid-term. The Company considers both the cost and value of GHGs; for example, Husky places a value on CO2 as a means to enhance heavy oil production. For example, Husky has evaluated investments in energy efficiency at the Sunrise and Tucker thermal facilities using internal carbon pricing in line with current and proposed regulations of \$30 per tonne, escalating to \$50 per tonne by 2022 to determine additional</p>
--	--	--	--	--	--	--

						sensitivity for the projects.
--	--	--	--	--	--	-------------------------------

---

## C12 Engagement

---

### Value chain engagement

---

**(C12.1) Do you engage with your value chain on climate-related issues?**

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

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement	Details of engagement	% of suppliers by number	% total procurement spend (direct and indirect)	% Scope 3 emissions as reported in C6.5	Rationale for the coverage of your engagement	Impact of engagement, including measures of success	Comment
Compliance and onboarding	Included climate change in supplier selection / management mechanism	100% of new suppliers	0.31%	This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky.	All new suppliers are required to answer a series of questions in the supplier pre -qualification and qualification questionnaire. In this questionnaire, suppliers are asked on whether they disclose their climate-related information specifically to CDP. They are also asked if they comply with all applicable environmental laws and regulations, which include climate-related regulations within their jurisdiction.	Impact: Suppliers become aware that Husky is interested in their climate risks disclosure. Measure of success: Getting new suppliers to complete the questionnaire.	0.31% = new suppliers contracted in 2017, over 2017's total procurement spend
Engagement & incentivization (changing supplier behavior)	Emissions reduction incentives	19.2%	33.6%	This source of Scope 3 GHG emissions is not material when compared against the emissions related to the end-use combustion and / or oxidation of the products sold by Husky	In 2016, Husky joined the SmartWay Transport Partnership. This collaboration is designed to help businesses reduce fuel costs while transporting goods in the cleanest, most efficient way possible. SmartWay works with freight carriers and shippers that are committed to benchmarking their operations, tracking their fuel consumption and improving their annual performance. While not all Husky suppliers are SmartWay members, as the	Impact: Husky's Canadian Products Marketing business unit participates to drive fuel cost reductions, contributing to improved efficiency, and engages on best practices in the freight supply chain. Measure of Success: Onboarding additional carriers. Over 50% of the total kilometers driven within Canadian Products Marketing's Downstream operations are SmartWay carriers.	19.2% = SmartWay-registered carriers for Canadian Products Marketing load (5 carriers out of 26 total) 33.6% = Total spend on these carriers over total procurement spend on freight services.

Type of engagement	Details of engagement	% of suppliers by number	% total procurement spend (direct and indirect)	% Scope 3 emissions as reported in C6.5	Rationale for the coverage of your engagement	Impact of engagement, including measures of success	Comment
					program grows, Husky anticipates further fuel efficiency and cost improvements in the supply chain.		

---

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

Husky engages with its JV partners on large projects through JV committees that discuss numerous issues, including GHG emissions. Specifically, Husky and BP collaborate on GHG issues related to BP-Husky Refining LLC and the Sunrise Energy Project with the aim of achieving compliance strategy consensus. Husky prioritizes GHG engagement with value chain partners where there is a major risk posed by exposure to climate-related issues such as regulatory changes. Success is measured through financial indicators, including performance against carbon-related fee targets for facilities that fall under a regulatory scheme that includes a compliance cost for carbon emissions.

---

## Public policy engagement

---

**(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

- Direct engagement with policy makers
  - Trade associations
  - Funding research organizations
- 

**(C12.3a) On what issues have you been engaging directly with policy makers?**

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Carbon tax	Support	Husky continues to directly engage with provincial and federal government agencies through pro-active outreach, as well as through input to industry associations representing broad industry consensus.	Husky supports efforts to price carbon in a way that is equitable for all GHG emitters and preserves industry competitiveness.

Regulation of methane emissions	Support	Husky continues to directly engage with provincial and federal government agencies through proactive outreach, as well as through input to industry associations representing broad industry consensus.	Husky supports incentives for early action on methane emission reductions that give industry the flexibility to manage reductions efficiently.
Other: Clean Fuel Standard	Support with major exceptions	Husky continues to directly engage with provincial and federal government agencies through pro-active outreach, as well as through input to industry associations representing broad industry consensus.	Husky supports efforts to reduce the carbon intensity of all fuels, including transportation fuels, provided regulators recognize the impact of overlapping carbon regulations on the refining sector and the market can pursue compliance through all types of fuel.

---

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

---

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you influenced, or are you attempting to influence the position?
-------------------	--	---	---

<p>Canadian Association of Petroleum Producers (CAPP)</p>	<p>Consistent</p>	<p>CAPP's climate change policy principles as shown at <a href="http://www.capp.ca/responsible-development/air-and-climate/climate-change">http://www.capp.ca/responsible-development/air-and-climate/climate-change</a> CAPP's climate change policy principles are 1. Collaborative and Solutions-oriented (e.g. Given Canada's climate commitments and industry impacts, CAPP will proactively collaborate with governments and stakeholders towards appropriate policy solutions.) 2. Efficient, effective and predictable (e.g. Climate policy should target reductions where they are most efficient and effective right across the entire energy value chain from production to end use and considering fairly all sectors and jurisdictions.) 3. Technology and innovation focused (e.g. Policy should incent technology and innovation to address climate change, and capture the opportunity to export solutions to the world.) 4. Globally competitive (e.g. Canada's climate policies must ensure our resource development is cost and carbon competitive with other jurisdictions, especially the U.S. as our largest trading partner.)</p>	<p>Husky participates in working groups within CAPP to inform the industry association's position relative to climate change policy in Canada.</p>
<p>Canadian Fuels Association (CFA)</p>	<p>Consistent</p>	<p>CFA's policy position is presented at <a href="http://www.canadianfuels.ca/Issues-Policy/Policy-Positions/#Climate">http://www.canadianfuels.ca/Issues-Policy/Policy-Positions/#Climate</a> Climate Change / GHG Emission Reduction To address the risks of climate change, reducing GHG emissions has become an important global issue. Under the auspices of the Paris Agreement, virtually every country has committed to reduce their GHG emissions. For Canada, our collective efforts to achieve a sustainable, lower carbon future must be founded on three key actions: • Explore, define and evaluate GHG emission-reduction pathways in collaboration with all stakeholders before targets are set. • Recognize Canada's productivity and competitiveness as core considerations in the development and implementation of a national GHG-reduction strategy. • Ensure that sound evidence and cost-benefit analyses drive decision-making and are transparently shared with citizens. Climate policy has far reaching implications for citizens, business and society in general. Canadian</p>	<p>Husky participates in working groups within CFA to inform the industry association's position relative to climate change policy in Canada.</p>

		Fuels Association and its members support policy approaches that minimize the overall cost to society of reducing climate risks. Broad-based carbon pricing mechanisms that are transparent, uniform and predictable are useful tools to send clear price signals across the economy that can effectively and efficiently reduce Canada's carbon footprint.	
--	--	---	--

---

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

Yes

---

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

Key individuals in the business units and supporting service groups collaborate to align Husky's position through the Carbon Management Regulatory Monitoring Committee. The Company's climate change strategy is clearly communicated to policy makers either directly or through participation in industry association working groups within the jurisdictions where the Company operates. In 2017, Husky continued to support consistency in policy advocacy through the Company's Carbon Management Critical Competency Network, Carbon Management Regulatory Monitoring Committee and activity within the GHG management framework. Husky's Government Relations department works with the Carbon Management Critical Competency Network and Company representatives involved in policy engagement to ensure that policy advocacy activities are aligned.

---

## Communications

---

**(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	Status	Attach the document	Content elements
In voluntary sustainability report	Complete	See 2018 ESG report	<ul style="list-style-type: none"> <li>• Governance</li> <li>• Strategy</li> <li>• Risks &amp; Opportunities</li> <li>• Emissions figures</li> <li>• Other metrics</li> </ul>
In mainstream reports	Complete	See Husky's 2017 AIF and MD&A	<ul style="list-style-type: none"> <li>• Governance</li> <li>• Risks &amp; Opportunities</li> </ul>
In other regulatory filings	Complete		<ul style="list-style-type: none"> <li>• Emissions figures</li> <li>• Emission targets</li> </ul>

---

## C14 Signoff

---

### Signoff

---

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

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

---

#### Important Information

Companies should not consider their CDP response a means of complying with any regulatory requirement to share financially sensitive non-public information with the market. You may wish to consult with your financial, legal, and/or compliance departments for advice on your company's general approach to the provision of forward-looking statements and information concerning risks.

#### CDP questionnaire copyright and licensed use

The copyright to CDP's annual questionnaire/s is owned by CDP Worldwide, a registered charity number 1122330 and a company limited by guarantee, registered in England number 05013650. Any use of any part of the questionnaire, including the questions, must be licensed by CDP. Any unauthorized use is prohibited and CDP reserves the right to protect its copyright by all legal means necessary.

---

#### Terms for responding to Investors (2018 Climate Change)

These terms apply if you are submitting a response to the CDP Climate Change Questionnaire 2018 to Investors. If you are also submitting a response to Supply Chain Members the Terms for responding to Supply Chain Members (2018 Climate Change), below, will also apply.

## 1. DEFINITIONS

**Billing Company:** means the organization determined in accordance with the table at the end of these terms.

**CDP:** means CDP Worldwide, a charitable company registered with the Charity Commission of England and Wales (registered charity no. 1122330 and a company number 05013650). References to “**we**”, “**our**” and “**us**” in these terms are references to CDP and the Billing Company.

**Deadline:** means 15 August 2018.

**Fee:** means the fee set out in the table at the end of these terms, which is exclusive of any applicable taxes.

**Full version:** means the version of the Questionnaire which contains all questions that are applicable to you.

**Minimum version:** means the version of the Questionnaire which contains a subset of the questions included in the Full Version.

**Personal Data:** means data which relates to an individual who can be identified from the data, such as a person’s name and job title.

**Questionnaire:** means the Full Version and the Minimum Version of the CDP Climate Change Questionnaire 2018.

**Responding Company:** means the company responding to the Questionnaire. References to “**you**” and “**your**” in these terms are references to the Responding Company.

## 2. PARTIES

The parties to these terms shall be CDP, the Billing Company (where the Billing Company is not CDP) and the Responding Company.

## 3. THESE TERMS

These are the terms that apply when you submit a response to our Questionnaire to Investors. If you do not agree to these terms, please contact us at [respond@cdp.net](mailto:respond@cdp.net) to discuss them with us.

## 4. RESPONDING TO OUR QUESTIONNAIRE

**General.** When responding to our Questionnaire, you will be given a choice as to whether your response can be made public or whether your response is non-public. We strongly encourage you to make your response public.

**Deadline for responding.** You must submit your response to us using our online response system by the Deadline for your response to be eligible for scoring and inclusion in any reports.

**Public responses.** If you agree that your response can be made public, we may use and make it available for all purposes that we decide (whether for a fee or otherwise), including, for example, making your responses available on our website, to our investor signatories and other third parties and scoring your response.

**Non-public responses.** If your response is non-public, we may use it only as follows:

(a) make it available as soon as it is received by CDP to our investor signatories (as listed on our website) either directly or through Bloomberg terminals, for any use within their organizations but not for publication unless any data from your response has been anonymized or aggregated in such manner that it has the effect of being anonymized;

(b) make it available as soon as it is received by CDP to our group companies and affiliates (for example, CDP North America, Inc), our country partners, research partners, report writers and scoring partners:

(i) to score your response; and

(ii) for any other use within their organizations but not for publication unless any data from your response has been anonymized or aggregated in such manner that it has the effect of being anonymized.

**Amending your response.** You may amend a response that you have submitted at any time before the Deadline. After the Deadline has passed, your response can only be amended by our staff and we may charge a fee. Please note that any changes that you make to your response after the Deadline may not be reflected in any score or in any report.

**Scoring of responses to the Full Version (of the Questionnaire).** If you submit your response to the Full Version in English using our online response system:

(a) by the Deadline, your response will be scored;

(b) after the Deadline but on or before 1 October 2018 you can request an 'On-Demand' score for a fee. Please email [scorefeedback@cdp.net](mailto:scorefeedback@cdp.net) for more information on On-Demand scoring.

Please contact your local CDP office for information about scoring if you intend to submit your response in a language other than English.

**Scoring of responses to the Minimum Version (of the Questionnaire).** Responses to the Minimum Version will only be scored in certain circumstances. Please contact your local CDP office for further information.

**Publication of scores.** If you are responding to a CDP Climate Change Questionnaire for the first time you may choose for your score to be "private" but in all other cases CDP may publish your score, regardless of whether your response is public or non-public. If you choose for your score to be "private", unless you achieve an A grade in which case we may make your score public, we may only make it available to our group companies and affiliates (for example, CDP North America, Inc), our country partners, research partners, report writers and scoring partners, in each case for any use within their organizations but not for publication. Note that if you also submit your response to Supply Chain Members it will also be available to any Supply Chain Member that has asked you to respond to the Questionnaire. For further details please see the **Terms for responding to Supply Chain Members (2018 Climate Change)**.

## 5.FEE

**Fee.** We are a not-for-profit organization and charge certain companies an annual administrative fee to enable us to maintain the disclosure system. Unless you are exempt from paying the Fee, as set out below, if you are listed, incorporated or headquartered in a country that is listed in the next paragraph, you are required to pay the Fee plus any applicable taxes. The Fee is payable once regardless of how many responses (climate change, forests and water security) you submit in 2018. Please note that we may charge an additional fee if you want to change your response after you have submitted your response and you are seeking to make the change after the Deadline or if you submit your response after the Deadline and you would like it to be scored.

**Countries where the Fee applies.** A Responding Company will be required to pay the Fee if it is listed, incorporated or headquartered in any one of the following countries:

Argentina, Australia, Austria, Bahamas, Belgium, Bermuda, Brazil, Canada, Cayman Islands, Channel Islands, Chile, Colombia, Denmark, Finland, France, Germany, Hong Kong, Iceland, India, Indonesia, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico, Netherlands, New Zealand, Norway, Peru, Philippines, Portugal, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, the UK or the USA.

**Exemptions from the Fee.** A Responding Company is exempt from paying the Fee if:

- (a) it falls within one of CDP's investor samples and it has not submitted a response to CDP in the last three years; or
- (b) it is responding only to CDP's supply chain request.

Please note we will decide in our absolute discretion as to whether the Fee is payable or not and we will notify you before you submit your response. A full list of companies in our investor samples is available on our website.

**Payment of the Fee.** You must pay the Fee by credit or debit card or request an invoice via CDP's online corporate dashboard, which must be paid within such time as set out in the invoice. Please note that you will not be able to submit your response unless you have paid the Fee, you have requested an invoice or you are exempt from paying the Fee.

## 6. RIGHTS IN THE RESPONSES

**Ownership.** All intellectual property rights in your response will be owned by you or your licensors.

**License.** You grant to us, or shall procure for us, a perpetual, irrevocable, non-exclusive, assignable, sub-licensable, royalty-free and global license to use your response and any copyright and data base rights in your response for the uses set out in these terms.

## 7. IMPORTANT REPRESENTATIONS

You confirm that:

- (a) the person submitting the response to us is authorized by you to submit the response;
- (b) you have obtained all necessary consents and permissions to submit the response to us; and
- (c) the response that you submit:
  - (i) does not infringe the rights of any third party (including privacy, publicity or intellectual property rights);
  - (ii) does not defame any third party; and
  - (iii) does not include any Personal Data.

## 8. LIABILITY

**We do not exclude or limit in any way our liability to you where it would be unlawful to do so.** This includes liability for death or personal injury caused by our negligence or the negligence of our employees, agents or subcontractors; for fraud or fraudulent misrepresentation.

**We are not liable for business losses.** Subject to these terms, CDP and the Billing Company have no liability to you in any circumstances for any loss of revenue, loss of profit, loss of business, business interruption, loss of business opportunity, loss of goodwill, loss of reputation, loss of, damage to or corruption of data or software or any indirect or consequential loss or damage.

**Exclusion of liability.** Subject to these terms, CDP and the Billing Company have no liability to you in any circumstances arising from the content or submission of your response to us, our use of your response and/or the use of your response by any third parties.

**Limitation of liability.** Subject to these terms, CDP and the Billing Company's total liability to you in all circumstances shall be limited to an amount equivalent to the Fee or to £625 if you are not required to pay the Fee.

#### 9.GENERAL

**We may transfer our rights to someone else.** We may transfer our rights and obligations under these terms to another organization.

**Nobody else has any rights under these terms.** These terms are between you and us. No other person shall have any rights to enforce any of its terms.

**Entire agreement.** These terms constitute the entire agreement between you and us unless you also choose to share your response with supply chain members, in which case you will also be subject to our Terms for responding to Supply Chain Members (2018 Climate Change).

**Variation.** CDP (acting on its own behalf and the Billing Company's behalf, if applicable) reserves the right to change these terms at any time. Such changes shall be effective immediately or such other time as CDP elects. In the event of any materially adverse changes, you may request to withdraw your response within 30 days of us notifying you of the change.

**If a court finds part of these terms illegal, the rest will continue in force.** Each of the paragraphs of these terms operates separately. If any court or relevant authority decides that any of them are unlawful, the remaining paragraphs will remain in full force and effect.

**Governing law and jurisdiction.** These terms are governed by English law and you and us both agree to the exclusive jurisdiction of the English courts to resolve any dispute or claim arising out of or in connection with these terms or their subject matter or formation.

**Language.** If these terms are translated into any language other than English, the English language version will prevail.

#### 10.AMOUNT OF FEE

Location of Responding Company	Fee (exclusive of any applicable taxes)
Brazil	BRL 3,560

India	INR 67,000
Japan	JPY 97,500
UK	GBP 625
Europe (excluding UK)	EUR 925
Rest of the world	USD 975

11.BILLING COMPANY

Billing Company	Location of Responding Company
CDP Worldwide	Australia, Bahamas, Bermuda, Cayman Islands, Channel Islands, Hong Kong, Indonesia, Ireland, Malaysia, New Zealand, Philippines,

	Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, United Kingdom
CDP Worldwide (Europe) gGmbH	Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland
CDP North America, Inc	Canada, USA
Carbon Disclosure Project (Latin America)	Argentina, Brazil, Chile, Colombia, Mexico, Peru
Carbon Disclosure Project India	India
• • • • • CDP Worldwide-Japan	Japan



--	--

If the Responding Company is located in a territory that is not listed in the table above, the Billing Company shall be **CDP Worldwide**.

---

### **Terms for responding to Supply Chain Members (2018 Climate Change)**

**These terms apply if you are submitting a response to the CDP Climate Change Questionnaire 2018 to Supply Chain Members. If you are also submitting a response to Investors the Terms for responding to Investors (2018 Climate Change), above, will also apply.**

#### **1.DEFINITIONS**

**CDP:** means CDP Worldwide, a charitable company registered with the Charity Commission of England and Wales (registered charity no. 1122330 and a company number 05013650). References to “**we**”, “**our**” and “**us**” in these terms are references to CDP.

**Deadline:** means 29 August 2018.

**Full version:** means the version of the Questionnaire which contains all questions that are applicable to you.

**Minimum version:** means the version of the Questionnaire which contains a subset of the questions included in the Full Version.

**Personal Data:** means data which relates to an individual who can be identified from the data, such as a person’s name and job title.

**Questionnaire:** means the Full Version and the Minimum Version of the CDP Climate Change Questionnaire 2018.

**Responding Company:** means the company responding to the Questionnaire. References to “**you**” and “**your**” in these terms are references to the Responding Company.

**Supply Chain Member:** means an organization that is requesting data from its suppliers.

#### **2.PARTIES**

The parties to these terms shall be CDP and the Responding Company.

#### **3.THESE TERMS**

These are the terms that apply when you submit a response to our Questionnaire to Supply Chain Members. If you do not agree to these terms, please contact us at [respond@cdp.net](mailto:respond@cdp.net) to discuss them with us.

#### **4.RESPONDING TO OUR QUESTIONNAIRE**

**General.** When responding to our Questionnaire, you will be given a choice as to whether your response can be made public or whether your response is non-public. We strongly encourage you to make your response public, but in either case, we will not divulge the relationship between you and any Supply Chain Member that has asked you to respond other than to our group companies and affiliates

(for example, CDP North America, Inc), our country partners, research partners, report writers and scoring partners, all of which are obliged to keep such relationship confidential.

**Deadline for responding.** You must submit your response to us using our online response system by the Deadline for your response to be eligible for scoring and inclusion in any reports.

**Public responses.** If you agree that your response can be made public, we may use and make it available for all purposes that we decide (whether for a fee or otherwise), including, for example, making your responses available on our website, to our investor signatories and other third parties and scoring your response. Note that information you submit within the Supply Chain module (2018 climate change) will be treated as non-public (see below for details).

**Non-public responses.** If your response is non-public, we may use it only as follows:

(a) make it available as soon as it is received by CDP to any Supply Chain Member that has asked you to respond to the Questionnaire for any use within their organization but not for publication unless any data from your response has been anonymized or aggregated in such manner that it has the effect of being anonymized;

(b) make it available as soon as it is received by CDP to our group companies and affiliates, our country partners, research partners, report writers and scoring partners:

(i) to score your response; and

(ii) for any other use within their organizations but not for publication unless any data from your response has been anonymized or aggregated in such manner that it has the effect of being anonymized.

**Supply Chain module (2018 climate change).** Information you submit in response to the Supply Chain module (2018 climate change) (questions SC0, SC1, SC2, SC3 and SC4 of the Questionnaire) will be treated as non-public even if you choose to make your response public. Questions SC1.1, SC2.1, SC2.2a, SC3.1a and SC4.2e ask you to select a Supply Chain Member using a drop-down menu in our online response system, and only the Supply Chain Member you select for each row will have access to the information in it. For all other questions in the Supply Chain module (2018 climate change) the information you submit will be accessible to any Supply Chain Member that has asked you to respond to the Questionnaire. All information you submit in the Supply Chain module (2018 climate change) will be accessible to CDP and to our group companies and affiliates, our country partners, research partners, report writers and scoring partners, all of which are obliged to keep such information confidential.

**Amending your response.** You may amend a response that you have submitted at any time before the Deadline. After the Deadline has passed, your response can only be amended by our staff and we may charge a fee. Please note that any changes that you make to your response after the Deadline may not be reflected in any score or in any report.

**Scoring of responses to the Full Version (of the Questionnaire).** If you submit your response to the Full Version in English using our online response system:

(a) by the Deadline, your response will be scored;

(b) after the Deadline but on or before 1 October 2018 you can request an 'On-Demand' score for a fee. Please email [scorefeedback@cdp.net](mailto:scorefeedback@cdp.net) for more information on On-Demand scoring.

Please contact your local CDP office for information about scoring if you intend to submit your response in a language other than English.

**Scoring of responses to the Minimum Version (of the Questionnaire).** Responses to the Minimum Version will only be scored in certain circumstances. Please contact your local CDP office for further information.

**Publication of scores.** Unless you achieve an A grade, in which case we may make your score public, we may only make your score available to any Supply Chain Member that has asked you to respond to the Questionnaire, our group companies and affiliates (for example, CDP North America, Inc), our country partners, research partners, report writers and scoring partners, in each case for any use within their organizations but not for publication.

## 5. RIGHTS IN THE RESPONSES

**Ownership.** All intellectual property rights in your response will be owned by you or your licensors.

**License.** You grant to us, or shall procure for us, a perpetual, irrevocable, non-exclusive, assignable, sub-licensable, royalty-free and global license to use your response and any copyright and data base rights in your response for the uses set out in these terms.

## 6. IMPORTANT REPRESENTATIONS

You confirm that:

(a) the person submitting the response to us is authorized by you to submit the response;

(b) you have obtained all necessary consents and permissions to submit the response to us; and

(c) the response that you submit:

(i) does not infringe the rights of any third party (including privacy, publicity or intellectual property rights);

(ii) does not defame any third party; and

(iii) does not include any Personal Data.

## 7. LIABILITY

**We do not exclude or limit in any way our liability to you where it would be unlawful to do so.** This includes liability for death or personal injury caused by our negligence or the negligence of our employees, agents or subcontractors; for fraud or fraudulent misrepresentation.

**We are not liable for business losses.** Subject to these terms, CDP has no liability to you in any circumstances for any loss of revenue, loss of profit, loss of business, business interruption, loss of business opportunity, loss of goodwill, loss of reputation, loss of, damage to or corruption of data or software or any indirect or consequential loss or damage.

**Exclusion of liability.** Subject to these terms, CDP has no liability to you in any circumstances arising from the content or submission of your response to us, our use of your response and/or the use of your response by any third parties.

**Limitation of liability.** Subject to these terms, CDP's total liability to you in all circumstances shall be limited to £625.

## 8.GENERAL

**We may transfer our rights to someone else.** We may transfer our rights and obligations under these terms to another organization.

**Nobody else has any rights under these terms.** These terms are between you and us. No other person shall have any rights to enforce any of its terms.

**Entire agreement.** These terms constitute the entire agreement between you and us, unless you also choose to share your response with investors in which case you will also be subject to our Terms for responding to Investors (2018 Climate Change).

**Variation.** CDP reserves the right to change these terms at any time. Such changes shall be effective immediately or such other time as CDP elects. In the event of any materially adverse changes, you may request to withdraw your response within 30 days of us notifying you of the change.

**If a court finds part of these terms illegal, the rest will continue in force.** Each of the paragraphs of these terms operates separately. If any court or relevant authority decides that any of them are unlawful, the remaining paragraphs will remain in full force and effect.

**Governing law and jurisdiction.** These terms are governed by English law and you and us both agree to the exclusive jurisdiction of the English courts to resolve any dispute or claim arising out of or in connection with these terms or their subject matter or formation.

**Language.** If these terms are translated into any language other than English, the English language version will prevail.

---

## About CDP

CDP is an international non-profit that drives companies and governments to reduce their greenhouse gas emissions, safeguard water resources and protect forests.

Voted number one climate research provider by investors and working with institutional investors with assets of US\$100 trillion, we leverage investor and buyer power to motivate companies to disclose and manage their environmental impacts.

Over 6,300 companies with some 55% of global market capitalization disclosed environmental data through CDP in 2017. This is in addition to the over 500 cities and 100 states and regions who disclosed, making CDP's platform one of the richest sources of information globally on how companies and governments are driving environmental change. CDP, formerly Carbon Disclosure Project, is a founding member of the We Mean Business Coalition. Please visit [www.cdp.net](http://www.cdp.net) or follow us @CDP to find out more.

## What is the legal status of CDP?

CDP Worldwide (CDP) is a UK Registered Charity no. 1122330 and a company limited by guarantee registered in England no. 05013650. The charity has wholly owned subsidiaries in Germany and China and companies in Australia, Brazil and India over which it exercises control through majority Board representation. In the US, CDP North America, Inc. is an independently incorporated affiliate which has United States IRS 501(c)(3) charitable status.

---

© 2018 CDP Worldwide

---