

Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

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

Our Focus

Founded in 1994, Vermilion is a publicly traded, widely held, international energy producer headquartered in Calgary, Canada. We seek to create value through the acquisition, exploration, development and optimization of producing properties in North America, Europe and Australia — regions noted for their stable, well-developed fiscal and regulatory policies related to energy exploration and development.

Our Purpose

At the core of our business is our purpose: To responsibly produce essential energy while delivering long-term value to our people, shareholders, customers, partners and communities. We believe that providing energy to the many people and businesses around the world that rely on it to meet their daily needs and sustain their quality of life is both a great privilege and a great responsibility.

Our Priorities

We prioritize health and safety, the environment, and profitability, in that order. Nothing is more important to us than the safety of the public and those who work with us, and the protection of our natural surroundings. Our energy transition strategy focuses on reducing environmental impacts of traditional oil and natural gas production while developing renewable energy projects closely related to our core competencies.

Our Operations We focus on the exploitation of light oil and liquids-rich natural gas conventional and unconventional resource plays in North America, and the exploration and development of conventional natural gas and oil opportunities in Europe and Australia.

Our Strategic Plan

Our plan includes six Matters of Importance, with strategic objectives that guide us to 2030: Extraordinary People & Culture; Health, Safety & Environment; Financial Discipline; Robust & Profitable Portfolio; Business & Operational Excellence; & Integrated Sustainability. We are a

conventional producer in Europe and Australia, not employing hydraulic fracturing in our operated European assets. In North America, we use hydraulic fracturing of horizontal wells to develop some of our oil & gas reservoirs, complying with a stringent regulatory regime.

One of Vermilion's defining strengths is our belief that sharing our success is essential to being a success. We have embedded this philosophy in our purpose to ensure that our key stakeholders – shareholders, employees, communities, governments, partners & suppliers – benefit from our achievements. This approach, based on the concepts of inclusive & sustainable growth, frames our business strategy & guides our role in the energy transition. Our energy transition plan rests on three strategic activities: focusing on efficient and responsible production of oil and natural gas; implementing technically and economically feasible options for emission reduction; and exploring new and evolving technologies and processes to identify synergistic fits for our business in both traditional and renewable energy production. This includes our geothermal projects in France, research into biogas, geothermal and hydrogen potential in Netherlands, and hydrogen potential in France and Ireland.

Because traditional fuels, particularly natural gas, will be required to support the energy transition, providing energy security, accessibility and affordability, we believe that citizens, governments & investors should turn to best-in-class oil & gas operators. In particular, natural gas has a role to play by replacing high-carbon fuels such as coal for electricity generation, which will become increasingly important as the number of electric vehicles increases. In 2022, our natural gas production in Canada alone would have enabled a third party to avoid 8,932 kT of CO₂e compared to utilizing power generated by a coal-fired power plant.

In our operating regions of North America, Europe & Australia, we comply with some of the world's most stringent health, safety, environmental & human rights regulations. We voluntarily report to international frameworks such as GRI & CDP. Environmental responsibility is only a part of our sustainability focus. Inclusive growth, which we see as ensuring that everyone has an opportunity for economic advancement, is fundamental to community wellbeing & long-term democratic stability. We are therefore committed to ensuring that we produce energy in a socially responsible manner, respecting worker rights & community engagement. This broad focus on sustainability (environmental, economic & social) is why we have integrated our sustainability strategy with the UN's Global Goals for Sustainable Development (SDGs). The SDGs provide a common focus & language for the planet, stating a clear vision for our collective future. We recognize that our capabilities in health and safety, environmental stewardship, long-term economic growth generation, & creation of shareholder value provide us with opportunities and the responsibility to move the SDGs forward.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

No

C0.3

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

Australia
Canada
Croatia
France
Germany
Hungary
Ireland
Netherlands
Slovakia
United States of America

C0.4

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

CAD

C0.5

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

Operational control

C-OG0.7

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

Row 1

Oil and gas value chain

Upstream

Other divisions

C0.8

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

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	VET (TSE and NYSE)

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	<p>Sustainability is 1 of 6 strategic objectives in our long-range business plan. The Board has responsibility for overseeing Vermilion’s sustainability- and climate-related strategy and performance, including direction, goals and targets, with Board committees providing additional sustainability-related expertise in their areas of focus.</p> <p>Comprised of 5 independent directors, the Board’s Sustainability Committee (SC) provides targeted oversight of & advice for our approach, including: Sustainability Policy & long-range strategic plan; performance & progress on sustainability goals; id & mgmt of sustainability risks and opportunities; impact of sustainability & climate issues, including water, on business strategy, budgets & risk management; & communication of sustainability policies & performance. At least quarterly, the SC reviews management’s sustainability performance reports, which include ESG & climate risks, opportunities, activities & performance; environmental & social trends; & strategic community investment activities.</p> <p>The SC Chair reports to the Board on the SC’s work, including the Company’s performance & progress. Most members of the full Board attend SC meetings. The Board also reviews ESG thought leadership papers such as oversight frameworks, decarbonization pathways & managing the energy transition, from experts eg</p>

	<p>McKinsey, State Street & Kimmeridge Energy. The Board also oversees sustainability strategy & performance via the HSE Committee (environment & safety, risk management), Audit Committee (risk management), & GHR Committee (governance & people).</p> <p>The Board & SC use this info to ensure integration of sustainability & climate risks & opportunities, including water, into major decisions, such as long-range planning, budget and capital allocation, and mergers, acquisitions and divestments. In 2021 the Board reviewed the 10-year sustainability strategy for managing risks and opportunities identified under each strategy pillar of carbon, conservation (including water) and community and approved our GHG emission reduction targets, including our Scope 1 and 2 net zero by 2050 target and our Scope 1 15-20% intensity reduction by 2025 target. In 2022, the Board directed management to develop a Net Zero Transition Plan in 2023/2024.</p>
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C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan	<p>The Board’s primary responsibility is to foster the long-term success of Vermilion for all stakeholders, consistent with the Board’s responsibility to the shareholders to maximize shareholder value. The Board is also responsible to ensure management identifies the principal risks of Vermilion’s business and implements appropriate systems to manage risks identified.</p> <p>The Board and Sustainability committee receive quarterly briefings and performance reports on a variety of sustainability- and climate-related matters relating to ESG, including business unit updates, regulatory shifts, environmental and social trends, and strategic community investment activities. These are augmented by continuing education from third parties addressing various topics, including climate change and the energy sector, energy transition and ESG factors for institutional investors.</p> <p>The Sustainability Committee oversees long-term sustainability strategy, implementation, progress and communications. It also identifies and reviews emerging</p>

	<p>Monitoring the implementation of a transition plan</p> <p>Overseeing the setting of corporate targets</p> <p>Monitoring progress towards corporate targets</p> <p>Reviewing and guiding the risk management process</p>	<p>risks and opportunities associated with sustainability issues and how those are integrated into our enterprise risk management (ERM) system.</p> <p>The Sustainability Committee Chair reports to the Board and non-committee members of the Board are invited to attend Sustainability Committee meetings. This ensures a holistic view of sustainability is considered in Board decisions, such as long-range planning, budget and capital allocation, and acquisitions and divestments.</p> <p>In climate-related work in 2022, the Board and its Sustainability Committee followed its previous materiality assessment, climate scenario analysis and emission reduction target-setting by:</p> <ul style="list-style-type: none"> • Linking executive and employee compensation to climate concerns by adding targets for emission reduction, in addition to Asset Retirement Obligation (ARO) liability reduction, to the LTIP scorecard • Evaluating performance against our 2025 target to reduce Scope 1 emissions intensity by 15 to 20% by 2025 • Ensuring the Company developed a clear pathway in 2023 and 2024 to achieve Scope 1 and 2 net zero emissions by 2050 target, including a 2030 Scope 1 and 2 emission intensity reduction target • Receiving business unit updates on sustainability-related projects, including potential renewable fuel partnerships and projects utilizing end of life assets • Assessing freshwater use in our global operations, and ensuring water management plans for higher freshwater intensity assets are developed and/or maintained • Approving corporate lobbying activities to ensure alignment with our stated climate and other positions, including the Paris Agreement
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C1.1d

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

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	<p>Vermilion maintains a skills matrix to evaluate the skill set of the Board based on individual Director self-assessments, including with respect to sustainability skills and experience. The results are then evaluated for individual Directors and for the Board as a whole. The skills matrix helps us identify gaps in skills and is used when we search for new Directors. The GHR Committee reviewed the completed skills matrix and evaluations and is satisfied that the Board has the appropriate experience and skills to ensure the Board is performing well. The Board completed a discussion on the results with the objective of continuously improving Board effectiveness.</p> <p>Skills matrix: Our Board members have significant relevant experience in all facets of our business. All Board members are skilled in all of the areas within our matrix, which were updated to reflect additional sustainability-specific areas, including climate-related issues. The matrix illustrates the skill set of our Board based on:</p> <ul style="list-style-type: none"> - senior executive experience in the area from a function, role and knowledge perspective and/or significant operational experience; and - some familiarity and specific experience. <p>All board members have senior executive experience in the Sustainability (ESG) criteria of:</p> <p>Management or executive experience with, or knowledge of, risks and opportunities related to a broad range of environment impacts, including climate-related issues such as emissions reduction, regulatory frameworks and renewable energy, and social impacts such as human rights, labour rights, community development and investment, and overall stakeholder engagement and communications.</p> <p>We also assess continuing education, which in 2022 included our directors taking courses or workshops on the Net Zero Transition, CCUS, climate change, ecosystems, environmental management, ESG, ESG strategy, energy transition and sustainability financing, purpose & profit and operationalizing ESG.</p>

C1.2

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

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Providing climate-related employee incentives
Integrating climate-related issues into the strategy
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Organizational responsibility for sustainability and climate-related issues flows from the Board and its Sustainability Committee throughout the Company via our Executive Committee. This Committee comprises the President & CEO, Chief Financial Officer, VP Business Development, VP International & HSE, VP North America (Principal Members) and VP European Operations, VP Sustainability, VP People & Culture, VP Marketing, VP Investor Relations and General Counsel (Associate Members)

The VP Sustainability reports directly to the President & CEO, with the President & CEO ultimately responsible for climate-related risk identification and management.

Our corporate sustainability team provides a centre of excellence approach, advising the business on all aspects of sustainability, including environmental, climate and social trends, and reporting at least quarterly and more frequently as needed to the Board and / or the Sustainability Committee regarding progress. The corporate team is also responsible for external sustainability reporting.

Position or committee

Chief Financial Officer (CFO)

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Our Chief Financial Officer is also our chief risk and compliance officer, and is responsible to ensure that the risks and opportunities associated with climate issues, including emissions and water, are integrated into our Enterprise Risk Management framework and reported to the Board.

Position or committee

Other C-Suite Officer, please specify
Vice President, International & HSE

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Our VP International & HSE and VP North America together replace the position of Chief Operations Officer and lead the operationalization of sustainability.

Position or committee

Other, please specify
Vice President, Sustainability

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Developing a climate transition plan
Implementing a climate transition plan

Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Our VP Sustainability, reports directly to the CEO and presents on progress every six weeks to the Executive Committee, develops and implements sustainability strategy, working in partnership with corporate teams and business units to ensure that our strategy and reporting reflect Vermilion's goals as a company overall and for each region.

Position or committee

Other, please specify
Vice President, Business Development

Climate-related responsibilities of this position

Managing climate-related acquisitions, mergers, and divestitures
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Our VP Business Development is responsible to ensure that sustainability- and climate-related risks, including emissions and water management, are incorporated into merger, acquisition and divestment decisions, including reporting to the Board on these decisions.

Position or committee

Other committee, please specify
Executive Committee

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Our Executive Committee as a group is responsible to review and approve key financial, operational and strategic decisions. As such, the Committee and its members report to the Board more frequently than quarterly, and are responsible through their reporting lines for assessing, monitoring and managing climate issues such as energy, emissions and water use, regulatory changes, carbon pricing, and weather impacts.

Position or committee

Other, please specify

Manager, Corporate HSE

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Corporate Sustainability/CSR reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Various departments within the company report sustainability-related priorities and progress quarterly to either the full Board or Board committees, including governance updates, HSE targets and performance, People and Culture policies, and public and government relations. Our individual business unit managers, and Manager, Corporate HSE play key roles in assessing and managing climate-related issues including energy, emissions and water use, along with the safety and environmental impacts of weather changes.

Position or committee

Business unit manager

Climate-related responsibilities of this position

Managing climate-related acquisitions, mergers, and divestitures

Implementing a climate transition plan

Integrating climate-related issues into the strategy

Monitoring progress against climate-related corporate targets

Managing public policy engagement that may impact the climate

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The leaders of each business unit responsible for sustainability activities, including managing climate-related risks and opportunities within their organizations. Business unit leaders present to the Board on sustainability strategy, projects & progress in rotation, generally at least one per Sustainability Committee meeting. Each of our business units has also identified a Sustainability Lead, to support sustainability-related work.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	<p>Our compensation approach is one program for all to incentivize staff at every level to work toward our strategic objectives, including climate-related issues. Compensation program elements include base salary & short & long-term incentives, which we believe strengthens our organizational alignment with shareholder expectations.</p> <p>We measure Company performance annually using our balanced scorecards, which include climate-related measures such as releases (bonus) & ESG rating agency scores, including water management (long-term incentive plan).</p>

C1.3a

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

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Profit share

Performance indicator(s)

Board approval of climate transition plan
Progress towards a climate-related target

Implementation of an emissions reduction initiative
Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased share of low-carbon energy in total energy consumption
Increased share of renewable energy in total energy consumption
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Employee & executive compensation is tied directly to performance targets, including those related to sustainability and climate, through our corporate performance scorecards. Achievements within the short-term incentive plan (STIP or bonus) & long-term incentive plan (LTIP) scorecards also help determine STIP & LTIP budgets overall.

The 2022 corporate performance scorecards included both standard industry metrics & internal measures of performance which were compared to management plans approved by the Board. Our STIP scorecard (past year performance) includes a 10% weighting on HSE Performance, including climate-related goals and helps determine employee (including executive) variable compensation (bonuses). Our LTIP scorecard (past 3-year performance) includes a 10% weighting on Sustainability performance, and determines long-term variable (generally vested over 3 years) compensation.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

We believe there is a direct link between sustainability performance, including climate performance & overall business performance, & we expect sustainability performance to be a very significant factor in the long-term viability of our economic model. Our LTIP corporate performance scorecard includes a sustainability specific measure to illustrate to our organization the importance of this measure & to incentivize all staff to focus on sustainability performance in their daily work. Previously, we measured our performance relative to our peer group in 3 third-party sustainability rankings: CDP Climate, S&P Global and Sustainalytics, the latter 2 of which include water scores. Currently, this measure has been changed to reflect measures that better align with our long-term sustainability targets, as follows:

- Emissions Reduction (5%)
- Asset Retirement Obligation Reduction (3%)
- ESG Rating Agency Scores (2%)

This holds a 10% weighting & applies to all employees & executives.

Because overall employee compensation is linked to sustainability index performance, every employee is able to influence our score through activities ranging from energy conservation to recycling, all of which have a climate impact. In addition, specific facilities and operations staff in are assigned to the energy and emissions efficiency & reduction projects that are an integral part of our emissions targets, such as in

Saskatchewan and France, while the admin team has taken on trash reduction and reduced plastics use, all of which has a positive climate impact. We continued to provide additional focus on sustainability across all BUs in 2022, including scenario analysis, emission reduction strategy, emission reduction target setting, capital projects, climate-risk assessments & carbon liability measures.

Entitled to incentive

All employees

Type of incentive

Non-monetary reward

Incentive(s)

Internal company award

Performance indicator(s)

Progress towards a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased share of low-carbon energy in total energy consumption
Increased share of renewable energy in total energy consumption
Reduction in total energy consumption
Implementation of employee awareness campaign or training program on climate-related issues

Incentive plan(s) this incentive is linked to

Not part of an existing incentive plan

Further details of incentive(s)

Recognition is provided to groups & individual employees by managers & executive based on performance & project specific successes. Our Extraordinary Effort recognition program also provides small monetary rewards when staff have contributed significantly to project success, including environmental/energy efficiency projects for sites such as those associated with former Spartan assets and the rollout of a future-forward assessment of business strategy in France.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Recognition is provided to groups & individual employees by managers & executive based on performance & project specific successes. Our Extraordinary Effort recognition program also provides small monetary rewards when staff have contributed significantly to project success, including emissions or energy efficiency projects for sites such as those associated with former Spartan assets and the rollout of a future-forward assessment of business strategy in France.

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Profit share

Performance indicator(s)

Board approval of climate transition plan
Progress towards a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased share of low-carbon energy in total energy consumption
Increased share of renewable energy in total energy consumption
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Employee & executive compensation is tied directly to performance targets, including those related to sustainability and climate, through our corporate performance scorecards. Achievements within the short-term incentive plan (STIP or bonus) & long-term incentive plan (LTIP) scorecards also help determine STIP & LTIP budgets overall.

The 2022 corporate performance scorecards included both standard industry metrics & internal measures of performance which were compared to management plans approved by the Board. Our STIP scorecard (past year performance) includes a 10% weighting on HSE Performance, including climate-related goals and helps determine employee (including executive) variable compensation (bonuses). Our LTIP scorecard (past 3-year performance) includes a 10% weighting on Sustainability performance, and determines long-term variable (generally vested over 3 years) compensation.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

We believe there is a direct link between sustainability performance, including climate performance & overall business performance, & we expect sustainability performance to be a very significant factor in the long-term viability of our economic model. Our LTIP corporate performance scorecard includes a sustainability specific measure to illustrate to our organization the importance of this measure & to incentivize all staff to focus on sustainability performance in their daily work. Previously, we measured our performance

relative to our peer group in 3 third-party sustainability rankings: CDP Climate, S&P Global and Sustainalytics, the latter 2 of which include water scores. Currently, this measure has been changed to reflect measures that better align with our long-term sustainability targets, as follows:

- Emissions Reduction (5%)
- Asset Retirement Obligation Reduction (3%)
- ESG Rating Agency Scores (2%)

This holds a 10% weighting & applies to all employees & executives.

Entitled to incentive

Board/Executive board

Type of incentive

Monetary reward

Incentive(s)

Other, please specify

Retainers based on their committee and chair duties, including the members and chair of the sustainability committee.

Performance indicator(s)

Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

This position does not have an incentive plan

Further details of incentive(s)

Each year, the GHR Committee reviews the compensation paid to directors against industry practices for oil and gas companies of similar business model, size and scope. The peer group used to measure directors' compensation is the same group used to measure corporate performance. Retainers are targeted at the median of the market.

The total director compensation package recognizes the increasing responsibilities, time commitments and accountability of Board members. We conduct a review of director compensation annually to ensure we are providing a compensation package that allows us to attract and retain competent members to our Board. Recommendations are then made to the Board. Changes to retainers (if any) are approved by the Board of Directors.

Effective January 1, 2019, directors no longer participated in the employee long-term incentive plan (VIP) and were no longer eligible to receive performance share award grants. This change aligns the Corporation with best governance practices to eliminate the issuance of performance share awards to non-employee directors. They do, however, receive retainers based on their committee and chair duties, including the members and chair of the sustainability committee.

Explain how this incentive contributes to the implementation of your organization’s climate commitments and/or climate transition plan

The total director compensation package recognizes the increasing responsibilities, time commitments and accountability of Board members, including for the chair of the sustainability committee. The GHR Committee ensures that each member of the Board, the committees, the Chair of the Board are assessed annually in light of their relevant terms of reference. The assessments are done by way of a questionnaire conducted by our external legal counsel Norton Rose Fulbright

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	3	Short term is considered to be current year to 3 years.
Medium-term	3	6	Medium term is considered to be 3 to 6 years from the current year.
Long-term	6	50	Long term is considered to be 6 to 50 years from the current year.

C2.1b

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

Our Enterprise Risk Management system includes a corporate risk register in which we maintain records of identified risks to our business and our operations. Within the risk register, in addition to descriptions of the background and context of the risk, we use a risk matrix – approved by our Executive and Board of Directors – to identify the potential magnitude of the of the consequence of each identified risk on our business. The risk matrix is used to establish impact thresholds across a broad range of risk categories, including people, environment, business loss, reputation, regulatory, sustainability and security. We define substantive financial or strategic impact as part of this risk matrix, to ensure that the risks with the highest potential impact are appropriately managed.

As per our matrix, financial impact is deemed substantive if it could cause a business loss of more than \$10 million CAD (unrisked & before mitigation/recovery instruments).

A strategic impact is defined as substantive beginning at the following levels and including any escalations if it:

- Has persistent but reversible, long term effects on habitat, ecological communities, land, air, or water. Escalations include irreversible effects on these elements, persistent reduction in sensitive ecosystem function, or effects beyond a regional or operations scale.
- Requires a specific asset to be shut in for unknown duration during regulatory or legal proceedings. Escalations include the permanent withdrawal of authority to operate.
- Has reputational damage nationally or internationally and where stakeholder concerns lead to regional or more widespread interruption of operations.

Potential impacts to our business are also assessed within the risk matrix and the corporate risk register in terms of likelihood in order to quantify or qualify risk exposure to the organization and determine order of priority in which these risks will be managed. Other measures such as speed of onset and organizational vulnerability are risk qualifiers that are also used to help us with our risk ranking process to provide greater context for risk management.

Substantive impacts with a probability greater than 1/1000 or assessed as Possible require the implementation of additional safeguards to achieve ALARP (As Low As Reasonably Possible) or the formal approval from the Vice President or Managing Director level to temporarily maintain operations while solutions are being put in place.

An example of potential substantive impact is the risk scenario that carbon taxes in Canada could exceed \$10MM as the federal carbon tax escalates to \$170/t by 2030; this is before mitigation via provincial programs or emission reduction projects.

C2.2

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

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

Our Approach to Risk Management, and Why It Matters

Effective risk and crisis management positions the company for better resiliency from the present to the future. We use a multi-layered approach to ensure identification, awareness and effective management of our business-related risks, including sustainability risks. This includes identifying business opportunities that may arise from changing conditions.

How We Manage Risk

Sustainability-related risks and opportunities, including those related to climate, are integrated into multi-disciplinary Company-wide risk identification, assessment, and management processes as part of our ERM system, based on the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework. This provides an integrated approach to managing risk as it impacts strategy and performance, and includes Operational, Market & Financial, Credit, Organizational, Political, Regulatory Compliance, Strategic and Reputational, and Sustainability categories.

Identifying and Assessing Risks

Overall, risk and opportunity management is the responsibility of the Board and Executive Committee based on a Top-Down, Bottom-Up approach to engage all staff. Top-Down begins with our Board and its committees with clear terms of reference, including oversight for identification and management of specific allocations of risk type. This is translated into action by our Executive Committee, which reviews and manages the ERM process through implementation of associated policies and procedures. Our staff help develop systems, standards and procedures. Bottom-Up is how staff implement, maintain and improve risk management processes, applying the hazard-risk-mitigation process in every part of our business.

Risks are identified by key staff across our Company, including our Operations, Finance, Health, Safety and Environment, Economics, Government & Public Relations, and Sustainability teams at corporate, business unit and asset levels. These employees have significant experience, and use a wide array of inputs, including operational and facility assessments, technical and research reports, external stakeholder organizations, government policy and regulation changes, industry initiatives, communities and landowners, and non-governmental entities.

The results are incorporated into our Corporate Risk Register, which provides a consistent framework to ensure the effective tracking and communication of our material risks. Using our Risk Matrix as a prioritization tool, Teams assess severity, likelihood, speed of onset, and vulnerability using scales from 1 to 5 for each factor, described in terms of human, environment, financial, social license and cybersecurity impacts.

Every risk case has also been assessed to determine where sustainability or climate-

related risk is a contributing factor. The results are provided annually at minimum to senior management, the Executive Committee and the Board and its Committees as appropriate, who further assess the risks including interdependencies.

Our sustainability materiality analysis, which assesses issues with impact for both the Company and our key stakeholders, is integrated into our ERM system using the Corporate Risk Register through a collaboration between our Finance, HSE, Operations and Sustainability teams.

Managing Risks

Our risk management approach focuses on reducing the risk to a level as low as reasonably practicable, accepting the risk, and/or controlling it (such as insuring it). For example, if direct mitigation is not possible (e.g. changes in temperature extremes), we would adapt our business processes to reduce the potential impact (e.g. changing work hours to avoid extreme mid-day heat). In other situations (e.g. increasing risk of flood), we may take measures to protect against the risk (e.g. flood controls) while also insuring our operations.

Financial impact is deemed substantive if it could cause a business loss of more than \$10 million CAD (unrisked and before mitigation/recovery instruments). Substantive is defined further using the following thresholds:

- Has persistent but reversible, long-term effects on habitat, ecological communities, land, air, or water. Escalations include irreversible effects on these elements, -persistent reduction in sensitive ecosystem function, or effects beyond a regional or operations scale.
- Requires a specific asset to be shut in for unknown duration during regulatory or legal proceedings. Escalations include the permanent withdrawal of authority to operate.
- Reputational damage is national or international, or stakeholder concerns lead to regional or more widespread interruption of operations.

Emissions Long-Range Planning

To support climate risk identification and management, we previously developed a Carbon Liability Assessment Tool, with Scope 1 emissions quantification and regulatory information for each business unit. We assessed the price of carbon on both a realized cost and shadow pricing basis, and identified likely carbon pricing scenarios for all our operating areas.

In 2021 and 2022, we developed and piloted an Emissions Long-Range Planning Tool, which uses our 10-year projections of production to estimate our Scope 1 and 2 emissions, associated carbon taxes, and impacts of emission reduction projects. We are now using this to support our planning of production, capital allocation, budgeting, target setting and merger, acquisition and divestment decisions.

Transition Risk Case Study: Since 2017, we have actively identified increased pricing of GHG emissions such as carbon taxes as a short-term transition risk, as part of our regulatory & legislative risk monitoring. We identified the federal Greenhouse Gas

Pollution Act as potentially significant in Canada & responded by proactively aligning our emission reduction & reporting activities with provincial responses, to reduce the resulting tax liability, including operational & engineering reviews aimed at increasing efficiency, & reducing emissions & expense requirements at major facilities, which has identified a large number of climate-related opportunities. Mitigating actions are guided by our Management of Change process, specific to the situation.

Physical Risk Case Study: Vermilion owns & operates an offshore platform off NW Australia & the Corrib project off the Irish coast, & oil fields in the coastal area of SW France; our risk process has identified that extreme weather events have the potential to directly impact our offshore operations resulting in down time or damage to infrastructure, particularly as weather patterns change & potentially worsen due to climate change. We have assessed both financial & strategic impact; in response, we have done extensive engineering work for re-lifing the Wandoo infrastructure, adjusted our operating procedures & arranged financial instruments to mitigate the potential for loss due to damage; we also monitor weather patterns daily as needed.

Value chain stage(s) covered

Upstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

Vermilion includes assessment of upstream climate related risk within our integrated risk framework, described in the 'direct operations' text above, but covering climate-related risks and opportunities in our upstream value chain, including governments, regulators, partners & suppliers. Our response in this section of text deals specifically with the upstream risk category.

Overall, we prioritize risk & opportunities based on the materiality, probability & potential impact to our operations. Impact to the environment as well as financial and strategic implications of identified climate change risks & potential project opportunities are built into the ERM process, with every risk in our Risk Register being assessed for its potential impact on climate change. Based on this information as well as business need, risk mitigations (i.e. climate related projects) are prioritized & completed in a manner that will allow Vermilion to support healthy communities as well as augment our strong shareholder value & return. This review for upstream risks considers the potential

impact of a 1.5 to 2D scenario, with these impacts included in our risk assessment process, including:

- Carbon taxation by governments
- Carbon sequestration through our partners
- Emission reporting obligations by governments and regulators
- Product efficiency regulations & standards by governments and regulators
- Uncertainty surrounding new regulation, and
- Reputation

The results annually feed back into our risk/opportunity management process to ensure Vermilion has a sound data foundation to support responsible decisions in our operating areas. Detailed analysis of these risks, including potential impact, financial implications, management methods & cost of management, support our business strategy related to the energy transition.

The upstream value chain assessment benefits from the integrated Market analysis completed by our Marketing Team, which includes assessment of global fundamentals. This falls under the oversight of the BOD Audit and Sustainability Committees and is reviewed during committee meetings at least 3 times/year, and by the Board during its annual strategy session.

We have also expanded our scenario analysis process. The Board of Directors, executive team and senior management, including the managing directors of our business units, participated in a robust scenario analysis, examining two key scenarios from the World Economic Forum that bring together the work of significant contributors in this area, from the International Energy Agency to Carbon Tracker. These scenarios compare a Gradual and a Rapid transition to low carbon, with the latter meeting the aims of the Paris Agreement to limit global temperature increases to 1.5°C to 2 °C, with 1.5 °C preferred. This provided an opportunity to assess the key factors impacting the speed of the energy transition, including the influence of new energy technologies, the potential speed of adoption of these technologies, the anticipated changes in policy and regulation surrounding the energy transition and their rate of change, and emerging market pathways such as India. The scenario analysis extended to the risks and opportunities related to these climate-related factors, the resulting impacts on the company's future not just in the short-term, but in the medium to long term (2050+), and strategies for Company resilience – overall and by business unit.

An example of the upstream risk that we consider is the availability and implementation of technology in our value chain upstream of our operations (i.e. by vendors providing services). This is both a risk and opportunity because the implementation of technology in our operations around the world ensures continued safe development and operation of our assets, which supports our commitments to HSE and Sustainability, as well as our Operational Excellence programs. Early engagement on the emergence and potential application of new technology in our programs, and ensuring outdated technology and practices are reduced by our vendors, is key to our ongoing operational

excellence. This specifically includes working with vendors and suppliers to reduce the greenhouse gas emissions of the services they provide to us, and to take advantage of programs they offer, often via government and/or regulator emissions reduction programs, to help us replace outdated technology with better options that incorporate either greater energy efficiency or renewable energy, such as the installation of small solar panels on our Mannville production sites in Canada.

Upstream opportunities include those associated with business development. Part of our overall business strategy and risk management is to establish our operations in regions around the world that have robust regulatory approaches to energy exploration and production. At the same time, our risk identification and assessment processes have identified that governments and regulators are increasingly concerned about working with strong, reputable and climate-aware producers. One of our responses is to include information about our management of sustainability and climate issues in our business development documentation for bid/RFP/license applications.

Value chain stage(s) covered

Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

Vermilion includes assessment of downstream climate related risk within our integrated risk framework, described in the 'direct operations' text above. Our process covers climate-related risks and opportunities in our downstream value chain, including direct impacts for stakeholders such as purchasers & joint venture partners, and indirect impacts for stakeholders such as our communities, which benefit from our investment in local infrastructure, employment and non-profit/charitable organizations. Our response in this section of text deals specifically with the downstream risk category.

Overall, risk & opportunities are prioritized based on the materiality, probability & potential impact to our operations. Impact to the environment as well as financial implications of identified climate change risks & potential project opportunities are built into the ERM process, with every risk in our Risk Register being assessed for its potential impact on climate change. Based on this information as well as business need, risk mitigations (i.e. climate related projects) or business process or strategic adaptations are prioritized & completed in a manner that will allow Vermilion to support

healthy communities as well as augment our strong shareholder value & return. This review for downstream risks considers the potential impact of a 1.5 to 2D scenario, with these impacts included in our risk assessment process, such as:

- Product efficiency regulations & standards
- Reputation
- Changing consumer behaviour
- Community climate risk concerns

The results annually feed back into our risk/opportunity management process to ensure Vermilion has a sound data foundation to support responsible decisions in our operating areas. Detailed analysis of these risks, including potential impact, financial implications, management methods & cost of management, support our business strategy related to the energy transition.

Specifically, this category is included in the integrated Market analysis completed by our Marketing Team, which includes assessment of global fundamentals. This type of risk falls under the oversight of the BOD Audit and Sustainability Committees and is reviewed during committee meetings 3 times/year. An example of downstream risk that is assessed is the impairment of a favourable market due to government regulation related to sources of energy.

Another example of downstream risk that we have identified, assessed and responded to is concern within our communities about the impact of oil and gas operations. We have responded in part through a focus on reducing our impact through operational excellence and HSE, through increased communication via our Public and Government Relations programs, and through our strategic community investment program, specifically by developing and launching our Global Environmental Stewardship Program. Through this program, the volunteer time and donations from our staff support non-profit and charitable organizations that are protecting the ecosystems and biodiversity that are important to the communities around our operational areas. Because of the connection to our staff, this not only supports employee engagement, but also helps our communities see a visible example of our commitment in this area when we are out planting trees, for example.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Vermilion is fully committed to operating responsibly in all of our jurisdictions, including meeting regulatory requirements and industry standards. This commitment makes both Current Regulation and Emerging Regulation material to our operations. On an ongoing basis

		<p>in every BU our technical teams assess our current operations and planned development activities to ensure that we operate within our commitment to responsible operations. We also engage external regulatory experts to ensure that our staff is up to date on current regulation, as well as upcoming changes to regulations impacting our operation. In addition, the Public and Government Relations staff in our business units provide important monitoring of the interpretation of current regulations, which can be subject to change by the courts and government departments.</p> <p>This type of risk falls under the oversight of the Board as well as the HSE and Sustainability Committees and is reviewed during committee meetings at least 3 times/year. An example in our Canadian operations that directly impacts climate change is our ongoing monitoring of Directive PNG036 in Saskatchewan, which provides regulatory requirements for reducing flaring, and venting of associated gas. This regulation augments the commitment Vermilion made to reduce emissions associated with flaring and venting in our Saskatchewan assets following the acquisitions of infrastructure with a high emissions profile in 2014 and 2018.</p> <p>A related regulation risk is that our Canadian operations are subject to the federal Greenhouse Gas Pollution Pricing Act (GGPPA), with carbon tax rates at \$50 /tCO_{2e} by 2022 rising to \$170/t by 2030. In 2019, the Saskatchewan government introduced regulations that provide for financial penalties starting in 2020 for methane emissions in excess of defined limits. Taxation is considered an ongoing risk and has the potential to change as a result of political elections. Increases in carbon taxes without mitigation by Vermilion, including participating in the Alberta and Sask GGPPA responses, would result in a decreased netback. Another regulation example is the Hulut Law in France, which prohibits the issuance of new oil and gas exploration concessions and limits the renewal of existing production concessions beyond 2040.</p> <p>These regulatory risks have the potential to increase both capital and operating costs, depending on the measures required for compliance. They may also require a change in business model.</p>
Emerging regulation	Relevant, always included	<p>At Vermilion, responsible energy development and stewardship includes ongoing assessment of emerging regulations in all of our business units around the world. In addition to the responsibility of managers and project leads to understand and ensure our activities are planned and completed in a manner that ensures compliance, Vermilion has positions that have direct responsibility for the identification of emerging regulations that could impact the</p>

		<p>organization.</p> <p>This type of risk falls under the oversight of the Board, HSE and Sustainability Committees and is reviewed during committee meetings at least 3 times/year. An example of emerging regulation and their associated risks impacting our operations is the risk associated with the regulation of carbon emission pricing in the regions where we operate. This is assessed on an ongoing basis, with a formal review occurring at a minimum of twice a year. Our focus on Integrated Sustainability led Vermilion to develop our country specific Carbon Liability Management Tool. Updated annually, this tool provides business unit leadership and project managers with the information to assess the current and forecasted carbon liability associated with our activities, based on the current, and forecasted changes to carbon cost in the short and medium term, and has now been replaced with our Emissions Long Range Planning tool, which forecasts emissions and taxes based on production, and allows us to assess the impact of various emission reduction projects.</p> <p>A key example of this type of risk is the European Union Green Deal, which aims to make Europe the first climate-neutral continent, with no net emissions of greenhouse gases by 2050, economic growth decoupled from resource use, & no person and no place left behind. Emerging regulation related to the Green Deal includes emission reduction targets for 2030, the inclusion of natural gas as an energy transition fuel, and the role of hydrogen in the energy transition, all of which can impact Vermilion's future. Related risks include the consideration by our operating regions of bans on internal combustion engines.</p> <p>These emerging risks have the potential to increase both capital and operating costs, depending on the measures required for compliance. They may also require a change in business model.</p>
Technology	Relevant, always included	<p>On an ongoing basis, we assess how new and emerging technology can impact our operations and business model, and also support our initiatives to reduce emissions, for example, or develop new products such as biogas or hydrogen.</p> <p>This risk operates at several different levels: on a global basis, emerging technology in renewable energy generation, LNG production, the varying sources of hydrogen production, and the impact on electricity demand of the increasing availability of electric vehicles, have the potential to impact the demand for fossil fuels. Coal-focused companies were the first to feel this impact, but oil and gas companies are increasingly impacted, particularly as national governments focus</p>

		<p>on renewables and other options, including emerging nuclear energy such as small-scale reactors, to decrease their reliance on fossil fuels. This may impact demand for our products. Since this is a quickly changing field, we are using scenario analysis to assess the potential impact on Vermilion of different speeds at which the energy transition, and the technology at its foundation, might move.</p> <p>Conversely, those technological advancements, including the potential for digitalization and artificial intelligence, may help Vermilion optimize its operations and improve return to our shareholders.</p> <p>A relevant example that aligns the global risk with the risk at our sites is our installation of small solar panels on our Mannville sites in Canada to harness renewable energy as a way to reduce our own emissions. Another is an ongoing program in Canada to install pump-off controllers at wellsites so that the pump operates only when enough fluid is present. Annually, this is expected to reduced power consumption by approximately 17 % resulting in an estimated 10,000 kWh saving per year per well. Current risks identified at the asset level also include the increasing pace of available technology, its cost, the resources available to assess and install it, and the cost vs benefits of using it when compared to our peers.</p> <p>This type of risk falls under the oversight of the Board and the Sustainability Committee and is reviewed during committee meetings at least 3 times/year.</p>
Legal	Relevant, always included	<p>We are committed to responsible energy development throughout the lifecycle of our operations. This includes, at a minimum, operating in compliance with all applicable regulations that govern our activities. However, our risk assessment has shown that regulatory compliance – and the anticipation of regulatory changes with proactive changes – may not be fully protective against the risk of legal challenges (a) against Vermilion directly, or (b) against other entities such as our regulators, with resulting effects on our operations.</p> <p>These risks are monitored by our corporate Sustainability team for legal risks with global scope, such as climate change liability suits launched by environmental non-governmental organizations and various levels of government, and such as cities and states, against the supermajors. These take several forms, including addressing liability for climate change caused by fossil fuels, and resulting damages, on behalf of specific groups. They also include attempts to establish fraud, such as New York state’s lawsuit against Exxon Mobil that focused on how the company had accounted for and reported the costs of climate change, including regulation.</p>

		<p>On a business unit level, staff including managing directors, permitting specialists and public and government relations staff monitor the potential for legal action either directly against the company or against a regulator to be taken to curtail production, stop or delay exploration, or otherwise contest permit and license applications. Examples of this have occurred in several of our regions, including in the US, where advocacy groups went to court to contest the Bureau of Land Management’s granting of oil and gas leases in Wyoming; in this case, the court ordered the BLM to reassess its environmental analysis to include a wider analysis of potential climate impacts. This type of action can create permitting delays for our exploration and production activities while the court process is followed.</p> <p>This type of risk falls under the oversight of the Board and the Sustainability Committee and is reviewed during committee meetings at least 3 times/year.</p>
Market	Relevant, always included	<p>Vermilion focuses on understanding and assessing market risks related to climate and beyond. This includes changing customer behaviour, such as consumers choosing renewable energy to fuel their homes, or electric vehicles. In 2021 and 2022, this has extended to the question of energy security and affordability, creating a situation where national governments are responding to market imperatives and electoral feedback by requesting both energy transition activities and increased oil and natural gas production from energy companies. This requires a careful balancing of both critical market needs, which impacts our business model and potentially our costs, revenue and development plans.</p> <p>We proactively identify market risks - and opportunities - through our sustainability, public and government relations, and marketing teams, who monitor a variety of market sources to analyze factors that could impact Vermilion directly, or the markets in which Vermilion operates. This includes our Board and senior leadership scenario analysis, which specifically addressed market issues under both a gradual and rapid transition scenario - assessing how quickly renewable energy sources can be made available and then adopted by our markets, for example, and where regulations intersect with market forces to accelerate this.</p> <p>This type of risk falls under the oversight of the Board, Audit and Sustainability Committees and is reviewed during committee meetings at least 3 times/year.</p> <p>Another example of market risks is the increasing cost of carbon credits associated with an increase in demand due to climate-neutral goals</p>

		<p>being set around the world. This impacts Vermilion’s low-carbon transition strategy, in terms of the choice of carbon credits as one of our potential tools, and the associated cost-benefit analysis. Another risk and opportunity is the potential for our customers to seek third-party assessment of our operations as responsibly produced. Certifying to independent levels can therefore be a competitive advantage.</p>
<p>Reputation</p>	<p>Relevant, always included</p>	<p>One of the dedicated risk categories within Vermilion’s Corporate Risk Register is Strategic & Reputational risk, which is a material risk given that Vermilion’s successful global portfolio of assets depends in large part on our reputation as a safe and responsible energy producer. This is especially important to our government, regulatory and community stakeholders, as it impacts our regulatory and social license to operate; if we lose these, we could face shutdowns of production or permitting delays. It is also a critical risk for the attraction and retention of qualified staff and contractors.</p> <p>Reputational risks operate at various levels, including the reputation of the oil and gas sector as a whole, and the reputation for Vermilion specifically. We actively monitor and support both, working within industry organizations to support best practices (such as our implementation of the IOGP Life-Saving Rules program) and working with our local stakeholders, including communities, landowners and governments to understand their views and respond to their concerns.</p> <p>This type of risk falls under the oversight of the Board, HSE and Sustainability Committees and is reviewed during committee meetings at least 3 times/year. It is also closely related to our operations, and the policies and processes in place to ensure safety and environmental protection.</p> <p>An example of a climate- related reputational risk that impacts our business on an ongoing basis is our social license to operate in all of our jurisdictions. As we, as a society, move toward less carbon intense fuels, how energy companies produce their products will become increasingly important. This was one of the guiding factors in Vermilion updating our organizational structure and making Integrated Sustainability one of our strategic objectives. It also makes the transparency of responsible production essential for our community stakeholders. We have responded by establishing staff with dedicated responsibilities for public and government relations, and for landowner relations, in our business units, and by developing a corporate stakeholder engagement framework to guide their work.</p> <p>A specific example of a reputational risk is where flaring is identified by either our operational staff or our communities as a potential issue. In</p>

		these cases, we assess the technical solutions, and implement as quickly as possible.
Acute physical	Relevant, always included	<p>Climate-related physical risks to our people, the environment and our assets are ever-presents risk that are assessed on an ongoing basis, as they have the potential to impact the safety of our people as well as our infrastructure, including production shut-downs and damage to sites and facilities. Typically this exposure is associated with the frequency and severity of extreme weather events. Vermilion has detailed corporate and operation-specific emergency response plans developed and implemented to assist in managing risks and impacts from acute physical climate-related risk.</p> <p>Our leadership and technical teams factor this risk into the planning portions of all projects completed annually. The frequency of this risk assessment is dependent on each specific risk case. This type of risk falls under the oversight of the Board, HSE and Sustainability Committees and is reviewed during committee meetings more than 3 times/year.</p> <p>For example, Vermilion Australia operates the Wandoo oil field on the North West Shelf of Western Australia. Annually, we are exposed to acute physical risk to our infrastructure associated with cyclone season. During cyclone season, our monitoring of conditions is continuous to support our ability to react and respond to a potential impact to our operation.</p> <p>We also assess climate-related physical risks on a longer term basis, examining the risk associated with worsening weather events such as floods and wildfires, as several of our operating regions have identified these as actual or potential risks.</p>
Chronic physical	Relevant, always included	<p>While many of the impacts related to climate change are acute in nature (as described above), Vermilion has identified a number of risk scenarios that have the potential to impact our operations related to chronic changes in the regions which we operate. These risks include changes to temperature extremes (hot and cold) affecting our ability to develop resources as planned, changes in precipitation resulting in regional redistribution of the resources in the hydrologic cycle impacting our ability to utilize water for our operations, and rising sea levels impacting our coastal operations and the communities in which we live and work.</p> <p>For example, flooding could result in limited access to locations / facilities, and poses a risk to our corporate headquarters (significantly mitigated since flooding last occurred in 2013). Alternatively, drought conditions could impact the availability of surface and / or groundwater,</p>

		<p>which Vermilion, in part, relies on for drilling and completion activities, and could negatively impact forecasted growth by increasing timelines and capital costs to bring new infrastructure onto production. This could also increase the likelihood of wildfires.</p> <p>Vermilion has experts in each of our Business Units who continually assess the options to develop our resource portfolios and where we can implement new technology to address challenges associated with chronic changes to the environment. This type of risk falls under the oversight of the Board, HSE and Sustainability committees and is reviewed during committee meetings at least 3 times/year.</p>
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C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation
Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Company-specific description

Short-term impact is primarily in Canada and Ireland. Canadian Federal Greenhouse Gas Pollution Pricing Act has set carbon tax rates at \$50 per tCO₂e in 2022, rising to \$170 by 2030, with provincial responses to keep pace with the federal system. Our Ireland operations are subject to the EU ETS and Ireland Carbon Tax systems. Longer-term impact rests on carbon pricing's vulnerability to changes in government policy.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

With our recent Northeast British Columbia acquisition, our Canadian carbon tax liability increased to approximately \$1.6MM in 2022 and is forecasted to exceed that in the near term. Our Ireland EU ETS liability is forecasted to be approximately \$0.8MM in 2022, increasing to approximately \$2.6MM in 2025 and \$3.5MM in 2030. The Ireland Carbon Tax liability is expected to be an additional approximately \$0.1MM/year over this period. All estimates are net Vermilion.

Our carbon liability exposure is expected to increase as government policy and regulations related to climate change continue to evolve. In response to these changes, our current forecasting indicates that our unmitigated carbon liability could exceed \$10MM annually in the medium to long term.

Cost of response to risk

5,000,000

Description of response and explanation of cost calculation

Our exposure is mitigated by provincial responses to the Act, including Alberta's Technology Innovation and Emissions Reduction (TIER) regulation and Output-Based Pricing Systems (OBPS) in Saskatchewan and forthcoming in British Columbia. Our ongoing efforts to reduce the energy and emissions intensity of our operations are integral to managing this risk, including our emission reduction targets. Vermilion continues to monitor and comply with taxation requirements.

Our Emissions Long Range Planning tool inputs production, emission and carbon tax forecasts, and provides impacts of various emission-reduction projects in terms of emission reductions and annual tax liabilities. Using a notional abatement cost of \$300/tCO₂e, we estimate that approximately \$5MM in emission reduction expenditures will be required to meet our 2025 Scope 1 target.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation
Enhanced emissions-reporting obligations

Primary potential financial impact

Increased direct costs

Company-specific description

Climate and other ESG reporting obligations are evolving rapidly, with Vermilion potentially subject to the International Sustainability Standards Board (2025) and European Sustainability Reporting Standards (2028), U.S. Securities and Exchange Commission and Canadian Securities Administrators Climate-Related Disclosure Rules, and Canada's Modern Slavery Act. Although Vermilion's existing sustainability-related disclosure provides a sound foundation for compliance, there are costs to implement these, particularly potential requirements for increased levels of audit. The impact to Vermilion would be a decreased netback per BOE, due to increased expenses for staff time and system development and implementation.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

800,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial impact is an increase in operational cost associated with the management and quantification of emissions to meet new reporting requirements, and the

administrative costs associated with reporting and audit obligations. This is estimated at \$0.8MM annually.

Cost of response to risk

800,000

Description of response and explanation of cost calculation

Regulations in all of our business units are monitored on an ongoing basis, and assumptions/ scenario planning is used annually to assess risk. In Canada, we implemented an external emission data gathering software in 2021 to support the evolving regulatory landscape. Vermilion also engages stakeholders relating to emissions reporting obligations. Management of this risk is built into Vermilion's operations and our ERM. In addition, we expect to automate our emissions data gathering, aggregation and calculation processes in 2024, while ensuring audit-ready processes for all ESG data points to align with proposed regulatory requirements

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation
Mandates on and regulation of existing products and services

Primary potential financial impact

Increased direct costs

Company-specific description

Vermilion's operations are subject to regional regulatory and political changes that result in changes to equipment requirements such as engineering and equipment modifications to reduce carbon emissions and / or emissions of criteria air contaminants. The most likely short-term impact is regulations in Canada and the European Union to reduce methane emissions, in France to reduce flaring, and in Netherlands to reduce NOx. From a macro perspective, geopolitical impacts (e.g. war in Ukraine) have escalated diverging government and consumer viewpoints on the need for energy security vs energy transition. We expect that demand for oil and natural gas to remain strong in the short to medium term, while safety and environmental regulations governing its production will increase. We have identified these risks as interconnected and existing in the short-term; however, they should be seen as medium- to long-term risks as well, impacting both existing production and acquisitions.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Operational changes to comply with existing methane reduction regulations is expected at approx. \$1.5MM in the short term, with those associated with eliminating routine flaring in France subject to continuing review in 2023.

The cost of compliance with proposed regulations, such as Canada's proposed regulatory framework for reducing oil and gas methane emissions to achieve a 75% reduction by 2030 is not yet established and will depend on the final version of the framework. Initial forecasting indicates that potential future compliance costs across all of our business units could exceed \$10MM in the medium to long term.

Cost of response to risk

200,000

Description of response and explanation of cost calculation

Vermilion is closely monitoring regulatory and market changes to ensure its approach to resilience under evolving conditions remains appropriate. We provide feedback to governments on proposed regulations, as per our lobbying disclosures, and allocate resources, including staff and capital, to ensure that required operational changes can be effectively actioned. In the short term, we are pursuing two emission reduction targets, with associated measures including tying in vented equipment to flaring infrastructure in Canada, using NOx scrubbers and NOx certificates to comply with new regulations in Netherlands. In 2023, we are developing our net zero to 2050 plan and 2030 emissions reduction target. We are also working with external partners to further implement and develop emission reduction technologies that are economic to the company, in part due to the potential generation of carbon credits. Based on stakeholder engagement, Vermilion believes that independent assessments of our operations by third parties are an important tool to demonstrate our responsible approach to production of essential energy. As a result, we have sought and achieved

Equitable Origin responsible gas producer certification for 3 of our Canadian sites, the AFNOR CSR Committed label in France, and the Business Working Responsibly mark in Ireland.

The cost of managing the risk is currently estimated to be approximately \$200,000 per annum (1 x FTE).

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Reputation

Other, please specify

Shareholder Divestment

Primary potential financial impact

Decreased access to capital

Company-specific description

Investors are raising concerns regarding risks related to emissions, environmental and biodiversity protection, water stewardship, and abandonment and reclamation liabilities.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

317,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Impact of divestment estimated to be equal to 0.25X of 2023E FFO reducing market capitalization by 317MM\$. This estimate covers all significant sustainability risk scenarios including but not limited to water stewardship, biodiversity, modern slavery, and community relations.

Cost of response to risk

500,000

Description of response and explanation of cost calculation

In addition to our net zero transition plan development, we have set public targets to reduce ARO liabilities and internal targets to maintain freshwater intensity performance via water management plans where higher-intensity freshwater use is, or could become, an issue. We are also prioritizing compliance with incoming sustainability reporting requirements, which are largely investor- and financial institution-driven.

Administrative costs associated with our sustainability (climate and water) and asset management programs are estimated at approximately \$0.5MM per year (2.5 x FTE).

Comment

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Reputation

Other, please specify

Changes in customer behaviour and legal challenges

Primary potential financial impact

Increased direct costs

Company-specific description

Government and community relationships are strongly linked to both social and regulatory licenses to operate. Communities where we operate also bear potential impacts, including noise, dust, lights, traffic, etc. Legal challenges against oil and gas industry increasing. Adoption of EVs, opposition to fossil fuels by public. Windfall tax/solidarity contribution.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

222,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Delays or shutdowns in production per day. Windfall tax impact of 222MM in 2022 expected to significantly decrease in 2023 due to decrease in commodity pricing.

Cost of response to risk

400,000

Description of response and explanation of cost calculation

Non-technical Risk Management Policy and framework, being implemented in 2023 that provides for community/social impact assessments. Lobbying policy being implemented in 2023. Strategic community investment program Ways of Caring. Engagement with governments on specific issues such as windfall tax.

The direct cost associated with monitoring and responding to the changing sustainability and emissions landscape is estimated at \$0.4MM per year. The estimate is based on a 0.25 FTE per business unit per annum (8 x 0.25 x 200k = \$400k).

Comment

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology

Transitioning to lower emissions technology

Primary potential financial impact

Increased direct costs

Company-specific description

Our emission reduction projects and net zero transition plan rely on technologies that are rapidly evolving, but in many cases unproven at larger scales and uneconomic for dispersed assets that are not, for example, near an electrical grid or pipeline gathering system. Assumptions by those outside the industry that broad generalizations on methane reduction being economical for all assets may prove false. Some technology projects will fail; others will prove uneconomic.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Based on the capital and/or operating spend required to reduce our near-term carbon tax liability through emission reduction projects. To be recalculated as part of the net zero by 2050 pathway plan.

Cost of response to risk

Description of response and explanation of cost calculation

Risk mitigated through careful and deliberate approach to new technology adoption. We have established sustainability project criteria that need to be met in order to move into the Vermilion Opportunity Development Process, providing various stage gates and offramps.

Comment

Identifier

Risk 7

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market

Other, please specify

Increased costs related to capital and financing

Primary potential financial impact

Decreased access to capital

Company-specific description

Pressure from stakeholders and limited access to debt, capital or insurance without the use of sustainability-linked financing arrangements.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

100 bps increase to total debt would represent \$10MM.

Cost of response to risk

Description of response and explanation of cost calculation

Establishment of 2 emission reduction targets and 1 ARO target, development of net zero transition plan and 2030 target, to establish groundwork for sustainability-linked financing should it be required.

Comment

Identifier

Risk 8

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical
Cyclone, hurricane, typhoon

Primary potential financial impact

Increased capital expenditures

Company-specific description

Vermilion's Wandoo field off northwestern Australia, Corrib project off the Irish coast and oil fields in the coastal area of SW France can be impacted by extreme weather events such as cyclones, resulting in down time or damage to infrastructure. Such events can also impact the downstream handling capacity of our partners, resulting in a limitation to the distribution and sale of our products.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

274,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Based on the value of the Wandoo Platform and a 1- in-10,000-year cyclonic event, the financial implications associated with damage due to a severe weather event is estimated at \$274MM (total impact before insurance). The third-party costs associated with potential damages from extreme weather events are not tracked.

Cost of response to risk

Description of response and explanation of cost calculation

Vermilion maintains insurance as a mitigative measure to reduce the financial impact associated with damage to our assets due to severe weather events. We also have a robust asset integrity program that maintains our offshore facilities to their original design specifications of CAT 5 hurricane force. We also have protocols for monitoring and preparing for cyclones and have invested in our emergency response capabilities in the event of damage to our assets due to severe weather.

Comment

Identifier

Risk 9

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology

Substitution of existing products and services with lower emissions options

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Although we see demand for oil and natural gas remaining robust in the short- to mid-term, it is likely that demand for oil and, to a lesser degree, natural gas will eventually fall as the energy transition evolves and various alternatives for renewable energy options become technologically and economically available. This could impact the need for our products in the longer term, post-2030 for oil and even further out for natural gas, potentially leading to lower commodity prices. As 2021-2022 have demonstrated, however, it will be critical to maintain adequate supplies of both oil and natural gas during the energy transition, to provide both accessibility and affordability.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Given the uncertain timeline and progression of the energy transition, and supply-demand dynamics, we are not using a financial forecast for impact. We are, however, using our scenario analysis to identify potential opportunities that would mitigate the risk to our products.

Cost of response to risk

Description of response and explanation of cost calculation

Based on our scenario analysis, we identified the need to explore new and evolving technologies and processes to identify synergistic fits for our business in both traditional and renewable energy production. We are pursuing this via our established track record in geothermal energy from produced water, for which our internal expertise in engineering, geoscience and drilling is particularly well suited. We are also investing in early R&D in other areas, such as biogas and the conversion of traditional oil and gas assets to geothermal and hydrogen production, to better understand the long-term potential.

Comment

Identifier

Risk 10

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Chronic physical
Sea level rise

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

Potential rising sea levels could impact our Netherlands assets and operations due to issues such as flooding, transportation difficulties, supply chain interruptions and salinization of groundwater.

Time horizon

Long-term

Likelihood

Exceptionally unlikely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

571,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

A rise in sea level could have an estimated financial impact of \$571MM before insurance at our main Netherlands gas processing facility Garijp (GTC) caused by an extreme 1-in-10,000-year tide/extreme wind event.

Cost of response to risk

Description of response and explanation of cost calculation

Physical measures such as conventional berms may not provide complete protection. Based on Vermilion's assessment of less than 0.05% probability over the next 5 years we have accepted this level of risk, reviewing it annually.

Comment

Identifier

Risk 11

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Other, please specify

Changes in Temperature Extremes (including rising mean temperatures), Changes in Precipitation Patterns, and Extreme Variability in Weather Patterns

Primary potential financial impact

Increased direct costs

Company-specific description

Based on RCP4.5, which limits warming to 3C (overshooting 1.5-2C), our assets and operations could experience climate changes between 2041 and 2070 such as: North America: 2-3C increase, 12-14% increased precipitation, 7-8% increased aridity, >10 fewer frost days and <25% decrease in number of dry spells. Europe: 1-2C increase, 0-5% increased precipitation, 4-12% increased aridity, generally decreased frost days, with several areas seeing <25% increase in number of dry spells. Australia: 1C increase; 8% increased precipitation SMHI, Climate Information, <https://climateinformation.org/>, last accessed: 9 July 2023. Overall warming temperatures, greater precipitation and generally drier conditions (due to increased evaporation) may increase capital costs for drilling, completion and workover operations due to increased timelines, equipment breakdown and restricted access in North America (fewer frost days). They may also impact the health and safety of workers, and create variability and potentially more severe weather events such as flooding, drought and wild fires. Flooding could result in limited access to locations; droughts could impact the availability of surface and / or groundwater required for drilling and completion. This could negatively impact growth by increasing timelines and capital costs to bring on new production.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial implications of a single time event (i.e. wildfire) have been assessed on a case-specific basis. Vermilion maintains insurance to mitigate the potential impact of precipitation-related extreme events (i.e. Wild fire, Flooding)

Cost of response to risk

Description of response and explanation of cost calculation

Each of our assets is assessed for potential risks and hazards, including those associated with weather events, from lightning to flooding to wild fires. These risks are reviewed at least annually on a case-by-case basis as part of our Enterprise Risk Management system. Mitigation approaches such as clearance of vegetation around facilities, and physical barriers to flooding, are implemented as per our HSE Management System, to protect the health and safety of our workers, contractors and the public, and to protect the environment.

Comment

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

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

Primary potential financial impact

Returns on investment in low-emission technology

Company-specific description

Directly related to the long-term transitional risk associated with the substitution of low-carbon products, we have the opportunity to participate in the development of those products. This has the potential to reuse our current infrastructure to provide alternative products, such as biogas or hydrogen, or to develop new products such as geothermal energy, creating new revenue streams.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

As this opportunity is in the early stage of assessment, it is difficult to quantify the financial impact, but it is estimated at up to \$2.0MM per year in revenue and returns on investment. Potential also exists for significant cost adjustments, as assets slated for abandonment would be repurposed to enable them to continue to generate energy.

Cost to realize opportunity

150,000

Strategy to realize opportunity and explanation of cost calculation

We are leveraging our technical experts and partnerships to provide input into alternative and renewable energy projects as they are identified. An example of the development of low emission goods/services is our France-based industry partnership with Avenia to expand the use of geothermal energy production in oil production, and a geothermal association in Germany. We have also developed criteria for approving the move of these ideas into our Vermilion Opportunity Development Process, which provides clear gates and criteria for considering and implementing such projects.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Other, please specify

Access to new markets

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

More stringent global measures to reduce emissions from individual ships by 30% by 2030, established through amendments to MARPOL Annex VI, came into force on Jan 1 2020, limiting the sulphur content of bunker fuel to a maximum of 0.5%. Vermilion's Australian Wando facility produces 4500 bbl/d of low sulphur crude oil that meets the needs of refineries in the short term to meet IMO regulations.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

49,300,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Vermilion conservatively foresees achieving a premium of \$10/bbl for its Wando production over the next three years for cumulative incremental revenue of \$49.3MM.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

Vermilion continues to access local markets for our low sulphur production, while exploring regions to expand our operations. Our Marketing group ensures that Vermilion meets its contractual obligation with our buyers in terms of volumes, delivery dates and crude quality. The marketing costs to realize this opportunity are built into our G&A.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Ability to diversify business activities

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Vermilion maintains a diverse, stable global portfolio of oil and gas assets. Our strong record of safe and socially conscious development of energy resources has provided opportunities to access and develop these resources. We see our commitment to sustainability as core to our business, which has provided important organizational focus on emissions quantification and management. As consumers become more aware of and involved in the selection of their energy sources and associated carbon intensity, we believe that Vermilion will continue to be a top quartile choice, providing us with opportunities not available to peer organizations.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

31,100,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial impact of changing consumer preferences is difficult to quantify. We foresee revenue opportunities in two distinct areas. (1) In consumers selecting premium energy products, with these products demanding a higher price than other energy sources on the market; currently we estimate the potential impact of premium pricing in the long-term to be \$1-5 per BOE, or \$31.1MM/year based on \$1 at 2022 production levels. (2) Access to more stringent markets, supported by our environmental and sustainability performance. Vermilion has entered into German, Hungarian, Croatian and Slovak oil and gas operations, which our sustainability performance has supported.

Cost to realize opportunity

750,000

Strategy to realize opportunity and explanation of cost calculation

Based on stakeholder engagement, Vermilion believes that independent assessments of our operations by third parties are an important tool to demonstrate our responsible approach to production of essential energy, and generate premium. As a result, we have sought and achieved Equitable Origin responsible gas producer certification for 3 of our Canadian sites, the AFNOR CSR Committed label in France, and the Business Working Responsibly mark in Ireland. We are currently assessing the potential to expand these certifications.

The funds associated with integrated sustainability are built into the operating costs of our producing regions, as well as corporate groups, and are estimated to be approximately \$0.75MM.

Comment

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Under the Canadian Environmental Protection Act and based on commitments made by the Canadian and Alberta governments and energy utilities relating to COP21, there is a commitment to reduce emissions for coal-fired power generation. Based on this and with

a number of power generating facilities in Alberta nearing the end of their service life, the demand for natural gas is likely to increase due to increased use of combined cycle gas turbine (CCGT) power generation.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The short term impact of this regulatory change on gas pricing is anticipated to be low and increase to medium in the mid- to long-term. Once the regulations have come into effect and the implementation period has occurred, there is a potential to see an impact on the marketable price and demand for natural gas. As a natural gas and oil producer, Vermilion would benefit from an increase in marketable prices for natural gas in our Canadian operations.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

As we move further into the energy transition, we foresee natural gas playing an impactful role as a less carbon intense fuel than other options (i.e. coal). Vermilion continues to focus on the identification of resources and assets where we have the opportunity to apply our industry leading expertise to optimize production while reducing emissions. An example of our strategy to realize this opportunity is our asset base in Alberta, which currently includes a large liquids rich gas play. Vermilion's marketing team is also actively pursuing options for our natural gas production that will enable Vermilion to achieve the best netbacks on production.

Comment

Identifier

Opp5

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Energy source

Primary climate-related opportunity driver

Shift toward decentralized energy generation

Primary potential financial impact

Other, please specify

Reputational benefits resulting in increased demand for goods/services

Company-specific description

The carbon intensity of energy used around the world has a direct relationship to where the energy product was generated. Vermilion's business unit structure supports production and distribution of energy products into local markets. This strategy results in the significant reduction of the carbon footprint of our energy when compared to non-local sources.

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The long-term financial impact of decentralized energy generation will depend on the speed of the energy transition balanced against the need for energy security. As such, we believe it is not possible to predict the financial impact at this time.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

Vermilion continues to assess where we can access local markets for our production, while exploring regions to expand our operations. The actions taken in the past several years to realize this opportunity include alterations to our structure, our strategic objectives and our operational development plans to support Vermilion as a distributed energy provider, and exploration and development programs in regions with relatively low energy production as compared to consumption (i.e. Hungary).

Comment

C3. Business Strategy

C3.1

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

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

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

We have a different feedback mechanism in place

Description of feedback mechanism

Direct engagement with financial and capital market participants such as investors, credit providers, etc, covering subjects such as Scope 1, 2 and 3 emissions, targets, net zero strategy, renewable energy projects and plans.

Frequency of feedback collection

More frequently than annually

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

C3.2

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

Use of climate-related scenario analysis to inform strategy

Row 1	Yes, qualitative and quantitative
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C3.2a

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

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA NZE 2050	Company-wide		<p>In 2023, we augmented previous work with a new analysis of climate-related transition risks. These scenarios are neither predictions nor forecasts; while they rely on the work of credible third-party organizations, they are constructions based on circumstances and assumptions that are highly vulnerable to macroeconomic and geopolitical changes. We have used them to inform our discussions on short, mid and long-term business strategy, along with risk identification and management.</p> <p>In our scenario analysis, our Executive Committee and Board reviewed an internally developed comparison of a diverse range of climate-related transition scenarios. We focused on changes in demand for oil and natural gas based on a Reference (business as usual) case and a Climate Policy (government support for reduced GHG emissions) case for Global, Advanced Economy and Emerging Economy scenarios. Specific scenarios included the International Energy Agency (Stated Policy, Announced Pledges and Net Zero), Equinor (Walls, Bridges), and BP (New Momentum, Accelerated), along with reference cases from Exxon, OPEC and the Energy Information Administration.</p>

			<p>The analysis showed the potential for energy demand declines over a 5- to 15-year horizon, but also showed greater impacts on specific assets based on government policies, location and logistics (landlocked vs waterborne), and proximity to petrochemical or carbon capture and sequestration capacities.</p> <p>For example, our analysis for the Reference case in advanced economies points to strong policy uptake in Europe and Industrialized Asia, as well as energy efficiency improvements in the residential and commercial sectors. Oil demand declines as energy transition policy momentum pushes road transport towards electrification, which is further displaced by biofuels after 2030. Efficiency gains reduce consumption, while demographic trends work against oil demand. Climate Policy scenarios see advanced economies driving a rapid uptake of renewables to a near full phase-out of combustible natural gas use, leading to a finale in the role of gas as a transition fuel. Gas use in 2050 is mostly consumed by the petrochemical sector and for hydrogen production. Both scenarios rely on assumptions such as a continued improvement in advanced technology development for renewables (for example, battery improvement); and the addressing of supply chain human rights and environmental issues for critical minerals.</p>
<p>Physical climate scenarios RCP 4.5</p>	<p>Company-wide</p>		<p>We also assessed the physical climate-related risks in each of our major operating regions using the International Panel on Climate Change's Representative</p>

			<p>Concentration Pathway (RCP) 4.5 Vermilion Energy Inc. scenario. We selected RCP 4.5 because it reflects the physical risks our operations would face if CO2 emissions do not start declining until approximately 2045, reaching approximately half of 2050 levels by the end of the century. This is more likely than not to result in rising global temperatures above 2C; specific geographic scenarios are summarized above in the Risks table. While we have set emission reduction targets that are significantly more ambitious than this, using RCP 4.5 enabled us to identify impacts to operations such as rising temperatures, aridity and dry spells in many areas, rising precipitation in some areas, and rising sea levels. Since climate volatility would also increase, RCP 4.5 highlights the need to consider adaptation and mitigation tactics including changing work schedules for daily heat cycles, along with greater wind, storm and wildfire protection for our assets. We note that RCP 2.6 (which requires CO2 emissions to have started declining by 2020) relies not only on reducing emissions, but also on removing significant amounts of greenhouse gases from the atmosphere, and reflects similar physical risks as 4.5 in the next 10-15 years, with lesser effects in the period 2050-2100.</p>
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C3.2b

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

Row 1

Focal questions

The Board of Directors & senior management participated in a robust scenario analysis, examining two scenarios from the World Economic Forum that bring together the work of experts from the International Energy Agency to Carbon Tracker. These scenarios compare a Gradual & Rapid transition to low carbon, with the latter meeting the aims of the Paris Agreement to limit global temperature increases to 1.5-2°C. We assessed key factors impacting the speed of the energy transition, including the influence of new energy technologies, their potential speed of adoption, anticipated changes in policy & regulation & their rate of change, & emerging market pathways. The analysis extended to risks & opportunities related to these climate-related factors, impacts on the company's future (2030+), & strategies for Company resilience, and covered the following focal questions:

What are the key factors that will influence the speed and timing of the energy transition?

Of these factors, what has the most immediate, short- to medium term (0-6 years) impact on Vermilion?

What do we need to put into place to address the most immediate factor?

What do we need to put into place to address factors to support our longer-term resilience?

The Gradual narrative is that the energy world of tomorrow will look roughly the same as that of today. Gradual scenarios include those from Exxon, OPEC, the World Energy Council and the Energy Information Administration as well as the IEA New Policies Scenario (NPS) and the BP Evolving Transition Scenario (ETS). Fossil fuel demand will rise for the foreseeable future and, when it does start to decline, the decline will be gradual.

The Rapid narrative is that current and new clean energy technologies are rapidly supplying all the growth in energy demand and together with new policies will reshape markets, business models and patterns of consumption leading to a peak in fossil fuel demand in the course of the 2020s. Rapid scenarios include normative scenarios, such as the IEA Sustainable Development Scenario (SDS), the International Renewable Energy Agency (IRENA) REMap, the Intergovernmental Panel on Climate Change (IPCC) less than two-degree models, the BP Rapid Transition Scenario, the International Institute for Applied Systems Analysis (IIASA), Low Energy Demand Scenario and the Shell Sky Scenario, as well as the primary scenarios of organizations such as Bloomberg New Energy Finance (BloombergNEF) DNV GL, McKinsey and the Energy Transitions Commission. These scenarios seek to achieve the goals of the Paris Agreement and imply that the energy sector is about to be disrupted. They forecast rapid growth in solar and wind electricity, the gradual electrification of transport, industry and heat, greater efficiency, policy action to tax fossil fuel users & the development of new technologies like green hydrogen.

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

What are the key factors that will influence the speed and timing of the energy transition?

We discussed key factors impacting the speed of the energy transition, including increasing demand for electrification and the role of natural gas and renewables, the influence of new energy technologies (solar, wind), the potential speed of adoption of these technologies and impediments to their growth, anticipated changes in policy & regulation & their rate of change, & emerging market pathways (China and India).

Of these factors, what has the most immediate, short- to medium term (0-6 years) impact on Vermilion?

We identified that policy and regulatory changes have the greatest potential impact on the company in the short-term, as our industry is highly regulated in our operating regions, all of which have net-zero by 2050 climate targets and are implementing changes in policy, operating regulations (e.g. methane) and taxation to achieve these aims. Of those regulations, emissions reduction was the most significant immediate requirement, as it provides the greatest evidence of our commitment and our progress.

What do we need to put into place to address the most immediate factor?

We identified an immediate need to set an aspirational target of net zero emissions from our operations by 2050 (Scopes 1 and 2). We recognize this must be founded on a clear pathway. Supported by our existing track record in setting and meeting emission reduction targets, we are continuing the journey with a target to reduce our company's Scope 1 emissions intensity by 15-20% by 2025, compared to a 2019 baseline. We have also committed to setting additional targets every five years, which will include assessing how Scope 3 emissions and intensity may be reduced.

To support our 2025 target, we developed an Emissions Long-Range Planning tool that forecasts emissions and taxes based on production forecasts and projected emission reduction projects, down to the business unit level. This provides critical input for decisions around financial planning, including capital allocation and merger/acquisition/divestment and new energy development.

What do we need to put into place to address factors to support our longer-term resilience?

In addition to developing a net zero strategy that will guide our actions post 2025 to ensure we reach our 2050 goal (in development through 2023 and 2024), we identified the need to explore new and evolving technologies and processes to identify synergistic fits for our business in both traditional and renewable energy production. This includes geothermal energy, for which our internal expertise in engineering, geoscience and drilling is particularly well suited, and is expanding into areas such as biogas and the conversion of traditional oil and gas assets to geothermal and hydrogen production.

C3.3

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

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>Based on the results of our scenario analysis, we reassessed and revitalized our business strategy. This included Integrated Sustainability as 1 of 6 pillars in our strategic business plan, with clear priorities set within the three areas of Carbon, Conservation & Community. Within the carbon category, we established long-term tangible objectives to 2030, along with short-to mid-term commitments that included creating a low-carbon transition plan to directly address climate-related risks. An example of a risk (and opportunity) case that influenced this plan is the potential for change in consumer behaviours (Risk 9 & Opportunity 3). This risk is associated with the impacts from negative consumer views of the organization & shifting energy source preferences, and has a potential impact of a loss of value on a per share basis (approximately \$162.4MM per \$1 of lost share value).</p> <p>Based on the cumulative effects of this risk & opportunity, along with several other product & service-related risks (1, 3 & 4) and opportunities (1 & 2), particularly emerging regulations and increased carbon pricing, we identified that exploring new and evolving technologies and processes to identify synergistic fits for our business in both traditional and renewable energy production should be 1 of 3 key activity areas within the Carbon priority. This includes alternative energy: developing our knowledge and use of alternative energy sources, including geothermal energy, for which our internal expertise in engineering, geoscience and drilling is particularly well suited. This work has begun with the geothermal potential of our produced water, supporting a circular economy model that conserves, reuses and recycles resources to better protect our environment. We are working with government, industry & other research</p>

		<p>entities to extend this, and we are also expanding into areas such as biogas and the conversion of traditional oil and gas assets to geothermal and hydrogen production. We expect to progress this work in the 2022-2030 timeframe.</p>
Supply chain and/or value chain	Yes	<p>Based on our forecasting, our operations will be increasingly exposed to supply & value chain impacts. For example, we have assessed impacts reported under Risk 1 (the impact of increased pricing from our fuel suppliers due to government carbon taxation in the value chain) and Opportunity 1 (the potential to participate in carbon markets, creating a potential new source of revenue), both of which are relatively small in the short term (2021-2024), but could significantly increase in the mid-term and beyond (2024-2030).</p> <p>An example of an opportunity in the medium-term that we believe will impact our operations is the impact from participation in the carbon market (Opportunity 1). We foresee a potential for the generation of certified carbon credits from our operations that could be traded in the EU ETS, with a timeframe of 2023-2030 (Medium Term). We are therefore researching the opportunities to participate in the carbon market, through the purchase of carbon credits, or our own generation of carbon credits based on biodiversity activities or certified responsible gas production.</p> <p>An example of an opportunity downstream in our value chain that we believe will impact our operations is the impact associated with the shift in consumer preferences associated with sourcing their energy products. In the long-term, as society moves through the energy transition, there is a need for responsible producers of traditional sources of reliable energy. There will likely be a niche market for producers who are committed to sustainability and providing energy products to their customers at a tCO₂e intensity better than others on the market. The magnitude of this opportunity is difficult to quantify, but it is estimated that the impact could be \$34.8MM to \$174.2MM (refer to 2.4, OPP4 for more details). This has provided additional motivation to pursue carbon market options, including third-party certification of select operations, with the potential to generate increased revenue and/or preference among customers for those products.</p>
Investment in R&D	Yes	<p>An opportunity that has and will continue to impact our business is research and development into low emission</p>

		<p>goods and services (Opp 2). This is occurring now, and we anticipate continuing through the short term to 2024, and potentially accelerating in the mid-term and beyond (2024-2030). We are leveraging our technical experts and partnerships to provide input into alternative and renewable energy projects as they are identified. We have developed clear criteria for approving the move of these ideas into and through our project development process, which provides clear gates and criteria for considering and implementing such projects.</p> <p>Examples include our partnership in Hylight, a 3-year project in Ireland that aims to provide the knowledge, data and tools to guide the cost-effective decarbonisation and roadmaps for sustainable large-scale implementation of hydrogen technologies.</p> <p>Another example is the identification of geothermal energy generation potential from our assets, which is anticipated to increase revenues over the lifecycle of our infrastructure through conversion of waste energy to heat, as well as decrease abandonment expenditures as assets are re-lifed from conventional production to renewable energy generation. To further this research, we have partnered with Avenia, an industry partnership that advises the French government on energy, on an industry and country-wide study to identify the potential for waste energy use from oil and gas operations. In addition to contributing financial support, we provided the expertise of our people, and actively encouraged other companies to participate. The results were shared following a detailed review by AVENIA. We are also involved in geothermal associations in Netherlands and Germany.</p> <p>In Harlingen, we have partnered with SPF Group, a producer of sustainable fuels, to investigate the use of our Harlingen Treatment Centre location for their biogas production site. The location includes a quay, which makes it possible to receive raw materials via water, thereby limiting truck transportation, and it offers existing buildings instead of new builds, which supports the sustainability principle that all parties involved are pursuing. It can also make use of Vermilion’s extensive gas infrastructure there.</p>
Operations	Yes	Vermilion has identified 4 physical risks associated with climate change, including tropical cyclones, rising sea

		<p>levels, changes in temperature extremes and changes in precipitation extremes (Section 2.3a Risks 5, 6, 7 & 8). The impacts of these risks to our operations include physical damage to our assets, loss of production capacity and environmental clean-up.</p> <p>As part of our ongoing strategy, we take a short-term, immediate approach by reassessing these risks annually to identify whether they are increasing overall (e.g. 1 in 10,000 cyclone vs 1 in 5,000 cyclone). We then identify options to better protect the infrastructure and local environment, along with investment in response capabilities, and assessment of insurance coverage to protect the business. This includes the initiation of a major company-wide project to support integrated technical teams in each business unit to develop and share best practices that advance our operational excellence, with peer reviews built into the process for a diversity of experience and skills. We believe that ongoing assessment and optimization of operations, as well as the ability to respond to non-operational events, is key to reducing the impact of climate related physical risks.</p> <p>We also identified an opportunity related to the regulations-intensive regions where we operate, for demonstrating our performance via third-party certifications. As a result, we have sought and achieved Equitable Origin responsible gas producer certification for 3 of our Canadian sites, the AFNOR CSR Committed label in France, and the Business Working Responsibly mark in Ireland. We are currently assessing the potential to expand these certifications and our use of methane performance certificates; while we are currently realizing a small premium associated with the sale of responsibly produced natural gas, future consumer preferences may demand that all fuels be certified – we will be in a strong position should that evolve.</p>
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C3.4

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

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs	Revenues The outcomes of our opportunity assessment process directly impact

<p>Capital expenditures</p> <p>Acquisitions and divestments</p> <p>Access to capital</p> <p>Assets</p> <p>Liabilities</p>	<p>planning in all scenario analysis completed. We have identified the potential for additional revenue in the next 10-20 years from returns on investment in low-emission technology (sale of carbon credits from emission reduction initiatives – 2.4 OPP1), geothermal projects (2.4 OPP2) & the expansion of favorable markets resulting from low emission goods & services (2.4 OPP3). Yearly impacts above the level reported in 2.4 are expected to be associated with greater access to consumers thereby increasing the price for our products. The new limit on sulphur content of bunker fuel used by the shipping industry can generate premium pricing for our low sulphur Wandoo field production (2.4 OPP6), increasing revenue in the future. The potential impacts are built into our project management assessment framework, which includes economic factors & impact on sustainability.</p> <p>Direct Costs</p> <p>Through our Corporate Risk Assessment & management process, we have identified 5 cases related to climate change that either have or could impact operating expenditures: financial impact related to regulation & taxation & impact from physical risks. Regulation & taxation risks include increased operational cost due to carbon taxation (Section 2.3 Risk 1) & potential increased operational cost of changes in regulation (Section 2.3, Risk 4). The potential magnitude of these risks is \$12.6MM annually by 2025. As a result, we have identified emission reduction projects that will reduce the ongoing annual cost of taxation. Physical risks that have or could impact our operating costs include changes in temperature extremes (Section 2.3 Risk 5), changes in precipitation (Section 2.3 Risk 6) & the frequency & intensity of storms (Section 2.3 Risk 8). The magnitude of these impacts includes damage to assets, business interruption & environmental cleanup & 3rd party liability (total impact before insurance). We have adjusted our financial planning for development activities to mitigate the impacts from delays related to weather extremes, including supplemental emergency response training & equipment to manage the impacts from cyclones/storms. To manage the impacts of taxation & regulation, we proactively review our infrastructure to reduce our emissions & engage regulators & government on policy. We have also developed internal expertise on carbon taxation related to our operations, which supports our risk management.</p> <p>Capital Expenditures</p> <p>All climate related risks quantified in our Corporate risk register are considered during the allocation of capital for development. This integrated nature of our project management framework ensures that our capital investment is effective & resilient. An example of how a risk scenario impacted capital allocation is the facility planning adjustments & re-engineering project completed in relation to product efficiency</p>
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	<p>regulations & standards (Section 2.3 Risk 3). Vermilion proactively conducts operational & engineering reviews aimed at increasing efficiency, including reducing emissions & financial requirements at major facilities. The magnitude of this impact, specific to the capital to manage this risk, is anticipated at \$2MM per annum.</p> <p>Acquisitions & Divestments Climate related risks, among other risks, are assessed & quantified during acquisition & divestment activities, including the impact from current regulation, as well as potential short-term regulatory changes, using our Emissions Long-Range Planning tool. This is also used to assess current & potential impacts of the price of carbon & is included when we assess the value of an asset package. E.g. we assessed the impact of a natural gas acquisition in the Montney formation (Leucrotta) on our emissions intensity & taxes, finding that it is expected to reduce our intensity. This is used by the integration team to identify opportunities to reduce emissions while optimizing production. The magnitude of the work completed against this category depends on the size of the acquisition or divestment. On larger acquisitions, this can have impacts to valuations in the tens of millions of dollars.</p> <p>Access to Capital As the investment community continues to add focus to sustainability factors, the expansion of access to capital to companies with a strong track record of sustainability performance will increase. Sustainability performance is integral to our business & is positively correlated to our strong shareholder returns. When compared to a 5-Year Total Return, comparing Sustainalytics, CDP Climate & S&P Global scoring, all indicate that strong sustainability performance positively correlates to shareholder returns. The magnitude of the impact of sustainability performance on access to capital will likely be industry-wide.</p> <p>Assets We have adjusted our strategy to ensure that Integrated Sustainability is engrained in our operations by making it 1 of 6 strategic objectives. Risk cases associated with the price of carbon as well as changing regulation have had, & will continue to have, an impact on our assets: e.g., the long-term impact in our France operations associated with the cessation of in-country oil production. As governments adjust regulations & expectations to support COP26 NDCs, we anticipate continued energy landscape changes. We also see opportunities associated with the energy transition: e.g. geothermal in France.</p> <p>Liabilities Vermilion has identified opportunities associated with re-lifing depleted oil & gas assets to support geothermal & hydrocarbon energy, & we</p>
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		<p>have adjusted our financial planning by committing to explore this alternative with partners in our European operations, including in France, Netherlands & Ireland. Building off the success & learnings from our geothermal co-generation projects in France, we joined the Green Deal in NL in 2017, a partnership of 7 companies with the Dutch Government & a non-profit research organization to investigate geothermal energy generation from natural gas infrastructure. We undertook a geological evaluation of the available 3D seismics, & concluded that the required Dinantien carbonate platform in Heerenveen is probably not present. While the project identified that this is not currently practical in our area, it demonstrates our partnership approach to developing new products & services through R&D. In France, we continue as an active participant in the H2020 MEET partnership to advance geothermal systems exploration & production with real projects in existing industrial environments. In Ireland, we have joined a partnership to assess the potential for the Corrib asset's infrastructure to be converted from natural gas to hydrogen. If successful, these projects will significantly reduce our financial liability for Abandonment & Reclamation while providing ongoing economic benefits for our communities.</p>
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C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

Identification of spending/revenue that is aligned with your organization's climate transition	
Row 1	No, but we plan to in the next two years

C4. Targets and performance

C4.1

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

Absolute target

Intensity target

C4.1a

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

Target reference number

Abs 2

Is this a science-based target?

No, and we do not anticipate setting one in the next two years

Target ambition

Year target was set

2018

Target coverage

Business division

Scope(s)

Scope 1

Scope 2 accounting method

Scope 3 category(ies)

Base year

2018

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

340,926.2

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO₂e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO₂e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO₂e)

Base year total Scope 3 emissions covered by target (metric tons CO₂e)

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

340,926.2

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

66

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO₂e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO₂e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO₂e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO₂e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO₂e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO₂e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO₂e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO₂e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO₂e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO₂e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO₂e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO₂e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO₂e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO₂e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO₂e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO₂e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO₂e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

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

66

Target year

2024

Targeted reduction from base year (%)

50

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

170,463.1

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

118,613

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

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

118,613

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

130.4171987955

Target status in reporting year

Retired

Please explain target coverage and identify any exclusions

In May 2018, Vermilion acquired Spartan Energy Corp., a publicly traded oil & gas company headquartered in Calgary, Alberta, Canada. A major addition, the acquisition of Spartan represented a substantial increase to our Alberta and Saskatchewan production in relation to our 2017 totals. Consistent with our corporate emphasis on Health, Safety and Environment, Integrated Sustainability and Operational Excellence, a target was set in 2018 to reduce flaring and venting emissions associated with the Spartan assets by 50% by 2024. This reduction was to be accomplished through a variety of gas conservation and recovery initiatives including the construction of new infrastructure and implementation of enhanced operational practices and technology.

Infrastructure changes and performance optimization activities undertaken by Vermilion subsequent to the acquisition have reduced flaring and venting emissions from the former Spartan assets by approximately 65% [$1 - (\text{Current Year Emissions} = 118,614 / \text{Base Year Emissions } 340,926) = 65.2\%$]. These reductions reflect an approximately 130% success rate to date in relation to our 2024 target ($(340,926 - 118,613) / (340,926 \times 50\%) = 130.4\%$].

Based on these results, the target was retired ahead of schedule in 2022.

Plan for achieving target, and progress made to the end of the reporting year

List the emissions reduction initiatives which contributed most to achieving this target

C4.1b

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

Target reference number

Int 1

Is this a science-based target?

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

Target ambition

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2 accounting method

Scope 3 category(ies)

Intensity metric

Metric tons CO₂e per barrel of oil equivalent (BOE)

Base year

2019

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

0.019

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

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO₂e per unit of activity)

Intensity figure in base year for total Scope 3 (metric tons CO₂e per unit of activity)

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

0.019

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

100

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

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

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

100

Target year

2025

Targeted reduction from base year (%)

20

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

0.0152

% change anticipated in absolute Scope 1+2 emissions

15

% change anticipated in absolute Scope 3 emissions

0

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

0.0173

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

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO₂e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

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

0.0173

Does this target cover any land-related emissions?

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

44.7368421053

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

As a global energy producer, we have an opportunity to be part of the low-carbon solution: to help ensure the supply of safe, reliable and affordable energy during this transition. This is why we have set an aspirational target of net zero emissions from our operations by 2050 (Scopes 1 and 2).

We recognize this must be founded on a clear pathway. Supported by our existing track record in setting and meeting emissions reduction targets, we are continuing the journey with a target to reduce our company's Scope 1 emissions intensity by 15% to 20% by 2025, compared to a 2019 baseline. We have also committed to setting additional targets every five years, which will include assessing how Scope 3 absolute emissions and emission intensity may be reduced.

Plan for achieving target, and progress made to the end of the reporting year

Our plan rests on three strategic activities:

- Focusing on efficient and responsible production of oil and natural gas, viewing emissions as potential energy sources:
 - Lower carbon fuels. Since 2012, we have shifted our production mix towards natural gas as a cleaner burning fuel than other fossil fuels, and sell our fuels within the country of production wherever possible, reducing the carbon footprint associated with transportation of the fuel to consumers while increasing national energy security.
 - Socially responsible fuels. We are committed to ensuring that our products are produced in an environmentally and socially responsible manner, respecting worker rights and community engagement.
 - Transparency and reporting. We have established a strong record of reporting on greenhouse gas emissions, energy usage and other key environmental metrics.

- Implementing technically and economically feasible options for emission reduction, covering combustion, flaring, venting and fugitive emissions
 - Greater energy efficiency. Many energy and operational efficiency initiatives go hand-in-hand.
 - Lower greenhouse gas emission intensity with particular focus on methane.
- Exploring new and evolving technologies and processes to identify synergistic fits for our business in both traditional and renewable energy production.
 - Alternative energy. We are continuing to develop our knowledge and use of alternative energy sources, including geothermal energy, biogas and the conversion of traditional oil and gas assets to geothermal and hydrogen production.

As described elsewhere, emission reduction activities undertaken since 2019 have included the implementation of gas conservation and recovery measures at our oil producing assets, discretionary production shut-ins for economic or operational (i.e. upgrade) considerations, and a strategic development focus on lower CO₂e intensity natural gas reserves.

The Scope 1 emission reduction measures implemented since 2021 represent a $(0.0190 - 0.0173) / (0.0190 - 0.0152) = 44.7\%$ progress towards our 2025 target.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

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

Target(s) to reduce methane emissions
Net-zero target(s)

C4.2b

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

Target reference number

Oth 2

Year target was set

2018

Target coverage

Business activity

Target type: absolute or intensity

Absolute

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

Methane reduction target
Total methane emissions in CO₂e

Target denominator (intensity targets only)

Base year

2018

Figure or percentage in base year

136,714.3

Target year

2024

Figure or percentage in target year

68,357.1

Figure or percentage in reporting year

50,858

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

125.5994979315

Target status in reporting year

Retired

Is this target part of an emissions target?

This is part of Target ID ABS2

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

This is a proportionate target associated with our target to reduce flaring and venting emissions from our former Spartan assets by 50% by 2024 (ABS2). The target represents a 68,357tCO₂e reduction in methane emissions (Baseline = 136,714 x 50% = 68,357 tCO₂e). The target applies to our Canadian Business Unit.

The operational response to this target consists of multiple projects with impact on a variety of emission sources. Infrastructure changes and performance optimization activities undertaken subsequent to the acquisition have reduced methane emissions from the former Spartan assets by approximately 63% [1-(Current Year Emissions =

50,858.2 tCO₂e / Base Year Emissions = 136,714.3) = 62.8% reduction]. This reflected an approximately 126% success toward our 2024 target of a 50% reduction over 2018 emission levels (136,714 - 50,858 = 78,189 tCO₂e; 78,189 / 68,357) = 125.6%).

Based on these results, the target was retired ahead of schedule in 2022.

Plan for achieving target, and progress made to the end of the reporting year

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Int1

Target year for achieving net zero

2050

Is this a science-based target?

No, and we do not anticipate setting one in the next two years

Please explain target coverage and identify any exclusions

As a global energy producer, we have an opportunity to be part of the low-carbon solution: to help ensure the supply of safe, reliable and affordable energy during this transition. That's why we have set an aspirational target of net zero emissions from our operations by 2050 (Scopes 1 and 2).

We recognize this must be founded on a clear pathway. Supported by our existing track record in setting and meeting emissions reduction targets, we are continuing the journey with a target to reduce our company's Scope 1 emissions intensity by 20% by 2025, compared to a 2019 baseline (INT1). We have also committed to setting additional targets every five years, which will include assessing how Scope 3 emissions and intensity may be reduced.

Our plan rests on three strategic activities:

- Focusing on efficient and responsible production of oil and natural gas, viewing emissions as potential energy sources:

- o Lower carbon fuels. Since 2012, we have shifted our production mix towards natural gas as a cleaner burning fuel than other fossil fuels, and sell our fuels within the country of production wherever possible, reducing the carbon footprint associated with transportation of the fuel to consumers while increasing national energy security.
- o Socially responsible fuels. We are committed to ensuring that our products are produced in an environmentally and socially responsible manner, respecting worker rights and community engagement.
- o Transparency and reporting. We have established a strong record of reporting on greenhouse gas emissions, energy usage and other key environmental metrics.
 - Implementing technically and economically feasible options for emission reduction, covering combustion, flaring, venting and fugitive emissions
- o Greater energy efficiency. Many energy- and operational-efficiency initiatives go hand-in-hand.
- o Lower greenhouse gas emission intensity with particular focus on methane.
 - Exploring new and evolving technologies and processes to identify synergistic fits for our business in both traditional and renewable energy production.
- o Alternative energy. We are continuing to develop our knowledge and use of alternative energy sources, including geothermal energy, biogas and the conversion of traditional oil and gas assets to geothermal and hydrogen production.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Unsure

Planned milestones and/or near-term investments for neutralization at target year

Planned actions to mitigate emissions beyond your value chain (optional)

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	19	
To be implemented*	4	19,600

Implementation commenced*	4	26,000
Implemented*	3	60,750
Not to be implemented	0	

C4.3b

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

Initiative category & Initiative type

Low-carbon energy generation
Solar PV

Estimated annual CO₂e savings (metric tonnes CO₂e)

350

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

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

Voluntary/Mandatory

Voluntary

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

0

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

700,000

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

This ongoing initiative encompassed of a number of solar projects in 2022 including the installation of solar powered remote monitoring equipment; new solar pump installations and solar retrofits of existing pumps; solar powered leak detection systems, and the application of solar panels in our DCET program. Collectively, these initiatives resulted in an estimated 350 tCO₂e emission reduction in 2022.

Initiative category & Initiative type

Low-carbon energy consumption

Large hydropower (>25 MW)

Estimated annual CO₂e savings (metric tonnes CO₂e)

28,500

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

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

41,000

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

In our Netherlands Business Unit, we have moved to acquire all of our purchased electricity from certified renewable sources. If we had not made the decision to purchase green power, based on published grid intensity information our 2022 Scope 2 emissions would have been approximately 28,500 tCO₂e.

Vermilion has been acquiring 100% of our Netherlands electricity as certified renewable power since 2017.

Initiative category & Initiative type

Energy efficiency in production processes

Fuel switch

Estimated annual CO₂e savings (metric tonnes CO₂e)

31,900

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

Scope 1

Voluntary/Mandatory

Voluntary

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

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

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

To achieve the emission reduction targets set for our Spartan (acquired in 2018) assets, we continue to invest significant focus on the reduction of flaring and vented solution gas at these sites. As described in Section 4.1, through multiple projects including the construction of new infrastructure, tying gas production into gathering systems to reduce flaring, installing vapour recovery units to mitigate fugitive emissions, and shutting-in uneconomical production, we have reduced CO₂e emissions associated with these assets by greater than 50% to date. On an annualized basis, and net of estimated emission reductions associated with production decline, the activities completed in 2022 resulted in an approximate 31,900 tCO₂e (per year) reduction in flaring and venting emissions.

The emission reduction activities are generally completed as part of larger capital programs and, consequently, the associated costs are difficult to disaggregate. Consistent with our objectives of optimizing production while minimizing our emissions intensity, all of the projects that have contributed to these reductions met Vermilion’s economic criteria prior to being implemented.

C4.3c

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

Method	Comment
Employee engagement	Vermilion’s structure and culture is designed to foster the sharing of ideas and garner maximum benefit from the expertise and experience of our staff, consultants and management. In addition to regularly held Business Unit meetings and international subject matter expert (SME) meetings, designed to facilitate the sharing information and learnings between all organizational groups, Vermilion hosts town halls where employees are encouraged to openly share ideas and provide questions and feedback on the company, its performance, corporate strategy and initiatives that they believe would benefit the organization via pre- and post- anonymous surveys. Vermilion also hosts an annual weeklong Global Operational Leadership conference. During this week, 25% of the agenda items at this conference are focused around HSE and Sustainability strategies and actionable plans. In addition to these corporate events, regular HSE meetings are held in all Business Units, as well as town hall meetings, where employees are encouraged

	<p>to discuss ideas and provide feedback. Our intranet also offers a “suggestion box” tool that is available to all staff. This frequently results in suggestions becoming actions and improvements in areas throughout the company. In 2020-21, we reassessed our business strategy, including a cross-functional, company-wide working group dedicated to Integrated Sustainability. Preliminary results were shared with the entire staff, with virtual workshop sessions and survey options provided for staff feedback to help guide the vision for the sustainability strategy, including the low-carbon transition plan.</p>
<p>Compliance with regulatory requirements/standards</p>	<p>One potential driver for Vermilion's emission oriented projects is the year-over-year reduction expectation defined by regulators in the countries in which we operate. This is one of the factors considered when Vermilion assesses emission reduction activities. We note that Vermilion assesses many factors associated with investment in all projects, including but not limited to, potential impact to the communities in which we live and work, potential sustainability impacts (HSE, energy use, water use, land protection, etc., and financial considerations.</p>
<p>Financial optimization calculations</p>	<p>As part of Vermilion's commitment to operational excellence, we are continuously seeking to find new, more efficient ways to produce our products and maximize shareholder returns. An example of this is the many optimization activities undertaken in Vermilion's Business Units that have a positive effect on fuel consumption and emissions. While having a positive impact on emissions and changing Vermilion's emission profile on a go forward basis, these activities typically also reduce financial outlay. This is an example of Vermilion utilizing our expertise to advance projects that will have an ongoing positive impact to the communities where we live and work and our sustainability goals while providing stable shareholder value and growth.</p>

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

No

C-OG4.6

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

Similar to other upstream oil and gas production, the majority of methane emissions from Vermilion’s operations stem from venting, flaring (recognizing that flaring is typically considered to achieve an approximate 98% combustion efficiency), storage emissions, and process/instrumentation emissions. At this time, we see the greatest opportunities to reduce methane emissions in our projects and programs surrounding leak detection and repair (see

Section 4.7) and our efforts to reduce flaring. Examples of our methane reduction efforts are the emission targets set for our former Spartan (ABS2/OTH2) and Elkhorn (ABS1/OTH1; retired in 2020) assets (Reference 4.2b). Both of these programs consist of a number of different types of projects, including the construction of new infrastructure, tying gas production into gathering systems to bring additional gas to market (and thereby reduce flaring/venting and associated methane emissions), and installing vapour recovery tanks with gas management to limit fugitive methane emissions.

Emissions reduction activities undertaken by Vermilion in relation to the Spartan assets are ongoing (initial target year 2024) and have resulted in greater than 100% progress towards this emission reduction targets to date. Based on the progress to date, the target was retired in 2023. The emission reduction targets associated with the Elkhorn assets were also exceeded and the targets retired in 2020.

C-OG4.7

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

Yes

C-OG4.7a

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

In all of our operations, we understand the integrated nature of Operational Excellence, Best-In-Class Health, Safety & Environment, and Integrated Sustainability (3 of our 6 strategic objectives). Vermilions method for elimination of methane leakage is simple: If a leak is identified, it is fixed.

Vermilion has a robust emissions quantification program in all operated business units. We also have fugitive emission programs in place that are managed through our operations groups in each business unit, with the exception of our offshore platform in our Australia operation (an oil asset with no natural gas production infrastructure). Our Leak Detection and Repair (LDAR) program varies between business units:

CBU: An expanded LDAR program was implemented in 2020 with effectively 100% of our operated Alberta facilities and multi-well pads now assessed at minimum annually using optical gas imaging (OGI) technology. At our predominantly oil producing Saskatchewan assets, OGI surveys are undertaken annually at our larger facilities in accordance with regulatory requirements. Routine checks for natural gas releases using a FLIR camera are completed by operations personnel at our smaller Saskatchewan assets in conjunction with regular field visits. In addition to thermal imaging, AVO (auditory, visual and olfactory) inspections are a standard component of operator field visits. Targeted identification of leaks during facilities work is also built into all turnaround activities.

FBU: Quantitative LDAR programs vary annually. This is an oil-dominated asset and the volume of natural gas and associated CH₄ is low. All operated well clusters are checked at least daily and twice daily in more sensitive areas such as Parentis Lake. Pipeline routes are surveyed at weekly or monthly intervals depending on the sensitivity of the pipeline location and pipeline type. Process security equipment including pressure sensors and hydrocarbon detection equipment are also installed on wellheads, cellars and pipeline infrastructure to detect leaks, shut-in production, and alert operations personnel.

NBU: Our Netherlands business unit has a robust LDAR program with effectively 100% of accessible flanges and potential leak points screened annually using thermal imaging technology.

ABU: This is an oil asset with no natural gas production infrastructure. Any associated gas is either utilized in on-platform processes to displace fuels we would have to bring from the mainland, such as diesel, or maintained within the process and reinjected into the formation it was produced from. While we do not complete a formal LDAR program for natural gas, any significant potential leak sources would be identified by our continuous gas detection monitoring system (line of sight and point source) or through on-platform crew visual inspections. Where required equipment is repaired and pressure/leak tested prior to return to service.

USBU: The USBU has a comprehensive leak detection and repair program that includes initial and semi-annual monitoring for fugitive emissions using a thermal camera at all wellsites that are subject to EPA and/or Wyoming air permit requirements. In addition to point source identification, Vermilion has permanently mounted monitoring equipment at our major facilities that check for the presence of natural gas outside of the process on an ongoing basis.

GBU: All producing oil and disposal wells are thoroughly checked at least twice per week, with not remotely surveyed being checked on a daily basis. In our operated gas assets, all wells and facilities are checked three to five times per week. During these checks all accessible flange connections are visually inspected for leaks. Field and transportation pipelines in our operated oil assets are inspected once per week in populated areas and once per month in unpopulated areas. Pipeline routes in our operated gas assets are checked every two months by walking in populated areas, and twice per year in unpopulated areas in accordance with regulatory requirements. Oil and gas transportation pipelines are also helicopter surveyed on a biweekly basis.

IBU: In the first year of operation a Differential Absorption LIDAR (DIAL) Survey was completed to survey for methane and VOC Emissions. No significant emissions were observed from the areas measured. OGI surveys are completed on a bi-annual basis and cover approximately 80% of accessible leak points. All identified leaks are managed through the operations weeps and seeps repair program. In 2021 of 95% the identified leaks were below the measurable leak detection rate for the High Flow Sampler.

C-OG4.8

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

During the production of petroleum energy products, some operational instances exist that make flaring a relevant and necessary part for the safe production of our oil and gas assets. Vermilion has reported on key climate-related metrics annually since 2012, which includes information associated with flaring related emissions.

Consistent with our philosophy that when we acquire production from less emissions-conscious companies, we address reducing these emissions under our care and control as a priority, Vermilion has made a commitment to reducing flared (and vented) emissions in the form of targets related to specific, higher intensity acquisitions within our Canadian business unit.

Spartan Energy Corp., acquired in 2018, represented an approximately 30% increase to our Alberta and Saskatchewan production at that time. Consistent with our corporate priorities, a target was set in 2018 to reduce flaring and venting emissions associated with the Spartan assets by 50% by 2024. This reduction is being accomplished through a variety of gas conservation and recovery initiatives including the construction of new infrastructure, tying gas production into gathering systems to reduce flaring, installing vapour recovery systems to limit fugitive methane emissions, and upgrading battery infrastructure. The target was retired ahead of schedule in 2023, having achieved approximately 130% of the target total.

Similarly, emission reduction targets were previously declared for Elkhorn Energy, acquired by Vermilion in 2014. The Elkhorn targets were retired in 2020 and represented an approximately 170,642 tCO₂e emission reduction, or approximately 176% of the Elkhorn target total.

France: At our Vic Bilh site in 2021, we successfully piloted the use of micro-turbines that consume natural gas that would otherwise need to be incinerated. Since commissioning, the turbines have produced an average of 258 KWh and a maximum of 395 KWh, out of the 570 KWh required to operate the two oil wells associated with the gas byproduct, thus also decreasing our use of the national grid. Based on the Vic Bilh results, the micro-turbine project was expanded on a larger scale to Cazaux in 2023, with additional studies planned for Parentis and Vaudoy in 2024. The Cazaux installation is scheduled to be operational in Q4 2023 and is expected to generate approximately 40% of the electricity requirements for the Cazaux field (8 MWh)

France: At our battery in Parentis, where no regional gas gathering infrastructure exists to tie in our gas, Vermilion has installed high efficiency incinerator technology that has significantly reduced flaring while resulting in no noise, vibration or smoke.

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

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

Row 1

Has there been a structural change?

No

C5.1b

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

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in methodology	<p>The following methodology or measurement changes occurred in 2022.</p> <ol style="list-style-type: none"> 1. Emission Scope Change – D&C Fuels: Based on our interpretation of the GHG Protocol Corporate Accounting and Reporting Standard, and related guidance, including the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, we have moved fuel combustion emissions associated with third-party drilling, completions and workover activities from Scope 1 to Scope 3. 2. Emission Scope Change – Owned and Operated Vehicles: Based on our interpretation of the GHG Protocol Corporate Accounting and Reporting Standard, and related guidance, including the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, we have moved fuel combustion emissions associated with owned and operated vehicles, including rental vehicles, from Scope 3 to Scope 1.

		<p>3. Change in Global Warming Potentials: In line with the respective domestic country guidance, global warming potentials used when estimating emissions associated with our Canada, France, Netherlands, German and Ireland business units were changed from the IPCC 4th Assessment Report (AR4) IPCC 5th Assessment Report (AR5) values (100 year).</p>
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C5.1c

(C5.1c) Have your organization’s base year emissions and past years’ emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold	Past years’ recalculation
Row 1			

C5.2

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

Scope 1

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

858,822

Comment

To be consistent with the Scope 3 base year emissions, and to align with our 2025 company-wide emission reduction target (INT1), our Scope 1 base year was adjusted from calendar 2012 to calendar 2019 during the 2022 CDP reporting cycle (last year).

Scope 2 (location-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

279,962

Comment

To align with our Scope 1 and Scope 3 base years, we adjusted our Scope 2 (location-based) base year from calendar 2012 to calendar 2019 during the 2022 CDP reporting cycle (last year).

Scope 2 (market-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

8,383

Comment

To align with our Scope 1 and Scope 3 base years, we adjusted our Scope 2 (market-based) base year from calendar 2012 to calendar 2019 during the 2022 CDP reporting cycle (last year).

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

44,791

Comment

Scope 3 category 2: Capital goods

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

42,369

Comment

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

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

272,375

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

101,417

Comment

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

17,904

Comment

Scope 3 category 6: Business travel

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

9,359

Comment

Scope 3 category 7: Employee commuting

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

1,020

Comment

Scope 3 category 8: Upstream leased assets

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

87,780

Comment

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

674,098

Comment

Initial base year

Scope 3 category 11: Use of sold products

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

12,937,168

Comment

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

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Negligible in relation to processing and use of sold products.

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable

Scope 3 category 14: Franchises

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable

Scope 3 category 15: Investments

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Negligible in relation to processing and use of sold products.

Scope 3: Other (upstream)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable

Scope 3: Other (downstream)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable

C5.3

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

American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009

Australia - National Greenhouse and Energy Reporting Act

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

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

US EPA Mandatory Greenhouse Gas Reporting Rule

Other, please specify

France Arrêté du 31 janvier 2008 relatif au registre et à la déclaration annuelle des émissions polluantes et des déchets

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

616,184.4

Comment

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

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

Reporting year

Scope 2, location-based

208,022.5

Scope 2, market-based (if applicable)

10,816.8

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

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

Purchased goods and services

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

78,047

Emissions calculation methodology

Spend-based method

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

0

Please explain

Scope 3 emissions related to Purchased Goods and Services were identified following the WRI/WBCSD GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Protocol"). Total GHG emissions are exclusive of any biogenic CO₂ emissions. An "Operational Control" approach as described in the Protocol was employed for the consolidation of Purchased Goods and Services. Emissions were

calculated according to an environmental economic input-output methodology using the following steps:

- 1) Expenditures on purchased goods and services were identified from primary financial accounting data and sorted according to economic sector;
- 2) Emission factors, for different economic sectors, in units of tCO₂e/\$ were formulated from WIOD national input output tables;
- 3) GHG emissions were calculated for each economic sector by multiplying expenditure totals with the relevant emission factors, followed by the summation of emissions for all economic sectors.

This Scope 3 category represented less than 1% of the total 2022 Scope 3 emission and is therefore considered to be not-relevant.

Capital goods

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

45,917

Emissions calculation methodology

Average spend-based method

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

0

Please explain

Scope 3 emissions related to Capital Goods were identified following the WRI/WBCSD GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Protocol"). Total GHG emissions are exclusive of any biogenic CO₂ emissions. An "Operational Control" approach as described in the Protocol was employed for the consolidation of Capital Goods. Emissions were calculated according to an environmental economic input-output methodology using the following steps:

- 1) Expenditures on capital goods were identified from primary financial accounting data and sorted according to economic sector;
- 2) Emission factors, for different economic sectors, in units of tCO₂e/\$ were formulated from WIOD national input output tables;
- 3) GHG emissions were calculated for each economic sector by multiplying expenditure totals with the relevant emission factors, followed by the summation of emissions for all economic sectors.

This Scope 3 category represented less than 1% of the total 2022 Scope 3 emission and is therefore considered to be not-relevant.

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

197,814

Emissions calculation methodology

Average data method

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

0

Please explain

Scope 3 emissions related to Fuel-and-Energy Related Activities (Not Included in Scope 1 and 2) were calculated following the WRI/WBCSD GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Protocol"). Total GHG emissions are exclusive of any biogenic CO₂ emissions. The emissions were calculated using the Quantis Scope 3 Evaluator.

This Scope 3 category represented approximately 1.7% of the total 2021 Scope 3 emissions.

Upstream transportation and distribution

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

109,222

Emissions calculation methodology

Spend-based method

Distance-based method

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

0

Please explain

Scope 3 emissions related to Upstream Transportation and Distribution were identified following the WRI/WBCSD GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Protocol") distance-based method, and a spend-based method. Total GHG emissions are exclusive of any biogenic CO₂ emissions. Distance based method emissions were calculated by multiplying the estimated distance travelled with the fuel quantity transferred and then by the corresponding emission factor for the method of travel. Spend-based method emissions were calculated according to an

environmental economic input-output methodology using the following steps: 1) Expenditures for Transportation and Distribution of goods incoming to Vermilion and between Vermilion operations were identified from primary financial accounting data; 2) Emission factors, for transportation methods, in units of tCO₂e/\$ were formulated from WIOD national input output tables; 3) GHG emissions were calculated for each transportation method by multiplying expenditure totals with the relevant emission factors, followed by the summation of emissions for all transportation methods.

This Scope 3 category represented less than 1% of the total 2022 Scope 3 emissions and is therefore considered to be not-relevant.

Waste generated in operations

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

6,649

Emissions calculation methodology

Average data method

Waste-type-specific method

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

0

Please explain

Scope 3 emissions from Waste Generated in Operations were identified following the WRI/WBCSD GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Protocol"). Total GHG emissions are exclusive of any biogenic CO₂ emissions. An "Operational Control" approach as described in the Protocol was employed for the consolidation of waste tonnages. Emissions were calculated according to established waste GHG quantification models including IPCC Emissions from Waste Incineration and the LandGem EPA model. An EPA drilling mud degassing emission factor was used to calculate offgas from drilling muds.

This Scope 3 category represented less than 1% of the total 2022 Scope 3 emissions and is therefore considered to be not-relevant.

Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

3,401

Emissions calculation methodology

Distance-based method

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

5

Please explain

GHG emissions from business travel were calculated following the WRI/WBCSD's GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ('Protocol' hereafter). Total GHG emissions are reported in metric tons of CO₂ equivalent, excluding biogenic CO₂ emissions and independent of any GHG trades. This section employed the 'Operational Control' approach for consolidation as described in the Protocol. For reimbursement of private vehicle use, actual km/miles traveled were utilized, which was then converted to GHG emissions using published (e.g. EPA or EU) emissions factors for passenger cars, depending on location of travel. For air travel, route and class specific information was utilized globally. Air travel emissions for CBU, FBU and NBU were obtained from the service provider.

This Scope 3 category represented less than 1% of the total 2022 Scope 3 emissions and is therefore considered to be not-relevant.

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

1,020

Emissions calculation methodology

Average data method

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

0

Please explain

Scope 3 emissions related to Employee Commuting were identified following the WRI/WBCSD GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Protocol"). Total GHG emissions are exclusive of any biogenic CO₂ emissions. The emissions were calculated using the Quantis Scope 3 Evaluator.

This Scope 3 category represented less than 1% of the total 2022 Scope 3 emissions and is therefore considered to be not-relevant.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Vermilion is using the Operational Control boundary and following this approach all emissions from leased assets are incorporated into Scope 1 and Scope 2.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

55,671

Emissions calculation methodology

Distance-based method

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

0

Please explain

Scope 3 emissions related to Downstream Transportation and Distribution were identified following the WRI/WBCSD GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Protocol") distance-based method, and a spend-based method. Total GHG emissions are exclusive of any biogenic CO2 emissions. Distance based method emissions were calculated by multiplying the estimated distance traveled with the fuel quantity transferred and then by the corresponding emission factor for the method of travel, followed by the summation of emissions for all transportation methods.

Processing of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

600,529

Emissions calculation methodology

Average data method

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

0

Please explain

Scope 3 emissions related to Processing of Sold Products were identified following the WRI/WBCSD GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Protocol") and customized for oil and gas. Total GHG emissions are exclusive of any biogenic CO2 emissions. All activity within the organizational boundary is included. Activity data is net production.

Emissions for oil refining were calculated using the Production Method: Tier 1, according to the following steps: 1) Average oil refinery emission factors were calculated for the type of oil Vermilion produces using publicly available refining data. 2) GHG emissions were then calculated by multiplying the crude volume totals with the corresponding refining emission factor and 100 year GWP. 3) Product volumes were obtained from Vermilion's annual report. 4) Emissions for natural gas and natural gas liquids processing were calculated using emission factors obtained from the US EPA and Vermilion's annual production. Emission factors for crude oil consumption were built from National Inventory Reports submitted to the United Nations.

This Scope 3 category represented approximately 5.1% of the total 2022 Scope 3 emissions.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

10,584,186

Emissions calculation methodology

Methodology for direct use phase emissions, please specify

Calculation method for direct use phase emissions for fuels and feedstocks

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

0

Please explain

Scope 3 emissions related to Use of Sold Products were identified and calculated following the WRI/WBCSD GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Protocol") and CDP Guidance Methodology for Estimation of Scope 3 Category 11 Emissions for Oil and Gas Companies. The total GHG emissions are exclusive of any biogenic CO₂ emissions.

Emissions were calculated according to the following steps: 1) Total annual production volumes were obtained; 2) Fuel combustion emission factors were calculated for each fuel type and production region; 3) GHG emissions were calculated by multiplying production volumes with the relevant fuel combustion emission factor; 4) Emissions from each region were summed to give the total emissions. IPCC GWP values (100 year) were used for the calculations.

This Scope 3 category represented approximately 90.6% of the total 2022 Scope 3 emissions.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Vermilion products sold do not generate any end of life GHG emissions because they are consumed as a primary source of energy or as a feedstock for other processes. Vermilion does not have any information on the fate of its products once they are sold. Since the majority of Vermilion's products are energy based, it is anticipated that there will not be any end of life emissions.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Vermilion does not lease any assets according to the definitions for this category.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Vermilion does not operate as a Franchisor, therefore, this section is not relevant for Scope 3 emissions.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Based on the Protocol and a quick analysis of values, the GHG emissions associated with investments would be minor and not material compared to the emissions from product use or transportation.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

Vermilion has not identified any "Other (upstream)" Scope 3 sources of emissions therefore this category is not relevant.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

Vermilion has not identified any "Other (downstream)" Scope 3 sources of emissions therefore this category is not relevant.

C6.7

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

No

C6.10

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

Intensity figure

0.0002

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

835,024

Metric denominator

unit total revenue

Metric denominator: Unit total

3,476,394,000

Scope 2 figure used

Market-based

% change from previous year

42.1

Direction of change

Decreased

Reason(s) for change

Change in revenue

Please explain

The year-over-year decrease in the revenue-based emission intensity is dominantly related to the general increase in commodity prices (oil and natural gas) that occurred in 2022 in relation to 2021. The ongoing emission reduction activities and methodology changes referenced in C7.9a also contributed to the 2022 reduction in this metric.

The referenced revenue value represents the total petroleum and natural gas sales as presented in our 2022 Annual Report.

Intensity figure

0.0269

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

835,024

Metric denominator

barrel of oil equivalent (BOE)

Metric denominator: Unit total

31,058,580

Scope 2 figure used

Market-based

% change from previous year

3

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities
Change in methodology

Please explain

The year-over-year decrease in emission intensity in this category is primarily related to the ongoing emission reduction activities undertaken in relation to our Canadian assets and the methodology changes referenced in C7.9a. The full year impact of 2021 facility modifications to reduce vented emissions at our offshore Australia operation also contributed to the reduction in this metric.

The 2022 intensity represents an approximate 3% reduction in relation to the 2021 intensity value [$1 - (0.0269/0.0277) = 2.9\%$].

C-OG6.12

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

Unit of hydrocarbon category (denominator)

Thousand barrels of crude oil/ condensate

Metric tons CO2e from hydrocarbon category per unit specified

22.5

% change from previous year

6

Direction of change

Decreased

Reason for change

The year-over-year decrease in emission intensity in this category is primarily related to the ongoing emission reduction activities undertaken in relation to our Canadian assets and the methodology changes referenced in C7.9a. The full year impact of 2021 facility modifications to reduce vented emissions at our offshore Australia operation also contributed to the reduction in this metric.

The 2022 intensity figure represents an approximately 6% reduction in relation to the 2021 intensity value $[(22.50 - 24.00)/24.00 = 6.3\%]$.

Comment

Unit of hydrocarbon category (denominator)

Million cubic feet of natural gas

Metric tons CO2e from hydrocarbon category per unit specified

2.9

% change from previous year

2

Direction of change

Decreased

Reason for change

The year-over-year decrease in emission intensity in this category is primarily related to the ongoing emission reduction activities undertaken in relation to our Canadian assets and the methodology changes referenced in C7.9a.

The 2022 intensity figure represents an approximately 6% reduction in relation to the 2021 intensity value $[(2.89 - 24.95)/2.95 = 2.1\%]$.

Comment

Unit of hydrocarbon category (denominator)

Thousand barrels of natural gas liquids

Metric tons CO₂e from hydrocarbon category per unit specified

19.8

% change from previous year

4

Direction of change

Decreased

Reason for change

The year-over-year decrease in emission intensity in this category is primarily related to the ongoing emission reduction activities undertaken in relation to our Canadian assets and the methodology changes referenced in C7.9a.

The 2022 intensity figure represents an approximately 6% reduction in relation to the 2021 intensity value $[(19.84 - 20.73)/20.73 = 4.3\%]$.

Comment

Unit of hydrocarbon category (denominator)

Other, please specify

Gross Inlet Throughput (BOE)

Metric tons CO₂e from hydrocarbon category per unit specified

0.01

% change from previous year

2

Direction of change

Decreased

Reason for change

The year-over-year decrease in emission intensity in this category is primarily related to the ongoing emission reduction activities undertaken in relation to our Canadian assets and the methodology changes referenced in C7.9a.

This 2022 intensity figure represents an approximately 2% reduction in relation to the 2021 intensity value $[(0.0173 - 0.0176)/0.0176 = 1.7\% \text{ reduction}]$.

Comment

C-OG6.13

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

Oil and gas business division

Upstream

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

0.15

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

0.12

Details of methodology

According to a 2016 Environmental Defense Fund report (Improving Methane Disclosure in the Oil and Gas Industry), scientific studies on methane emissions from the natural gas and oil industries suggest that in order to maximize the climate benefits of a transition from both diesel and coal to natural gas on all time scales, methane emissions from the industry must be limited to an emissions rate of 0.8%. Vermilion's emission ratio of CH₄ to natural gas production is significantly lower than the EDF's recommendations at 0.22% (on a v/v basis). When comparing CH₄ emitted to total hydrocarbon production within our emissions reporting scope (on a BTU basis), Vermilion's ratio is 0.12%. We feel that both of these values are a testament to our commitment to methane detection and reduction, and we continue to examine areas where we can improve.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO ₂ e)	GWP Reference
----------------	--	---------------

CO2	416,262	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	199,123	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	799	IPCC Fifth Assessment Report (AR5 – 100 year)

C-OG7.1b

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

Emissions category

Fugitives

Value chain

Upstream

Product

Oil

Gross Scope 1 CO2 emissions (metric tons CO2)

566.8

Gross Scope 1 methane emissions (metric tons CH4)

725

Total gross Scope 1 emissions (metric tons CO2e)

20,662.4

Comment

Vermilion quantifies venting and flaring in both the oil and natural gas value chains separately. These values are not aggregated in the total for the category, as per the reporting guidance.

Emissions category

Venting

Value chain

Upstream

Product

Oil

Gross Scope 1 CO2 emissions (metric tons CO2)

8,490.3

Gross Scope 1 methane emissions (metric tons CH4)

1,976.2

Total gross Scope 1 emissions (metric tons CO2e)

63,789.88

Comment

Emissions category

Flaring

Value chain

Upstream

Product

Oil

Gross Scope 1 CO2 emissions (metric tons CO2)

101,547.2

Gross Scope 1 methane emissions (metric tons CH4)

256

Total gross Scope 1 emissions (metric tons CO2e)

108,688.8

Comment

Emissions category

Fugitives

Value chain

Upstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

671.3

Gross Scope 1 methane emissions (metric tons CH4)

1,153.8

Total gross Scope 1 emissions (metric tons CO2e)

32,747.6

Comment

Vermilion quantifies venting and flaring in both the oil and natural gas value chains separately. These values are not aggregated in the total for the category, as per the reporting guidance.

Emissions category

Venting

Value chain

Upstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

14,744

Gross Scope 1 methane emissions (metric tons CH4)

2,690.2

Total gross Scope 1 emissions (metric tons CO2e)

90,032.1

Comment

Emissions category

Flaring

Value chain

Upstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

62,272.5

Gross Scope 1 methane emissions (metric tons CH4)

206.7

Total gross Scope 1 emissions (metric tons CO2e)

68,030.8

Comment

Emissions category

Combustion (excluding flaring)

Value chain

Upstream

Product

Oil

Gross Scope 1 CO2 emissions (metric tons CO2)

95,415.7

Gross Scope 1 methane emissions (metric tons CH4)

2.7

Total gross Scope 1 emissions (metric tons CO2e)

95,491.3

Comment

Emissions category

Combustion (excluding flaring)

Value chain

Upstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

132,422.5

Gross Scope 1 methane emissions (metric tons CH4)

18.7

Total gross Scope 1 emissions (metric tons CO2e)

132,946.3

Comment

Emissions category

Process (feedstock) emissions

Value chain

Upstream

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

930.9

Gross Scope 1 methane emissions (metric tons CH4)

102.3

Total gross Scope 1 emissions (metric tons CO2e)

3,795.3

Comment

C7.2

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

Country/area/region	Scope 1 emissions (metric tons CO2e)
Canada	410,343
France	69,708
Netherlands	8,029
Australia	57,684
United States of America	17,611
Germany	10,553
Ireland	42,256
CEE (Central and Eastern Europe)	0

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Production of Natural Gas	250,399.2
Production of Light & Medium Oil	308,148
Production of Natural Gas Liquids	57,637.2

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

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

	Gross Scope 1 emissions, metric tons CO ₂ e	Comment
Oil and gas production activities (upstream)	616,184.4	Vermilion is an upstream oil and gas producer. 100% of our Scope 1 emissions are attributed to our upstream activities.
Oil and gas production activities (midstream)	0	Vermilion is an upstream oil and gas producer. None of our Scope 1 emissions (0%) are attributed to midstream activities.
Oil and gas production activities (downstream)	0	Vermilion is an upstream oil and gas producer. None of our Scope 1 emissions (0%) are attributed to downstream activities.

C7.5

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

Country/area/region	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Canada	192,833	0
France	0	6,617
Netherlands	0	0
Australia	90	0
United States of America	15,088	0
Germany	0	4,199.8
Ireland	0	0
Hungary	0	0

C7.6

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

By activity

C7.6c

(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)
Purchased electricity	208,022.5	10,816.8

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

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

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

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Oil and gas production activities (upstream)	208,022.5	10,816.8	All of our Scope 2 emissions are associated with the upstream production of oil and gas.
Oil and gas production activities (midstream)	0	0	Vermilion does not have activities that fall within the midstream oil and gas production category.
Oil and gas production activities (downstream)	0	0	Vermilion does not have activities that fall within the downstream oil and gas category.

C7.9

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

Remained the same overall

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	3.2	This category did not materially impact our operations in 2022.
Other emissions reduction activities	27,800	Decreased	3.2	<p>Emission reduction activities completed in 2022 remained largely focused on our higher-emitting Saskatchewan (Spartan Energy) assets in Canada and included ongoing infrastructure changes and performance optimization measures to increase gas conservation and reduce flaring and venting. The full year impact of 2021 facility modifications to reduce vented emissions at our offshore Australian operations were also experienced in 2022.</p> <p>The net total of the 2022 emission reduction activities totals approximately 27,800 tCO2e and represents an approximately 3.2% reduction in relation to the quantified 2021 Scope 1 and Scope 2 total ($21,962.5/863,114 = 3.22\%$).</p>
Divestment	0	No change	0	This category did not materially impact our operations in 2022.
Acquisitions	17,440	Increased	2	In May 2022, our Canadian Business Unit acquired Leucrotta Exploration Inc. (TSE.LXE), which extended our Canadian operations into Northwest Alberta and Northeast British Columbia. The combined, 2022 Scope 1 and Scope 2 emissions associated with the Leucrotta asset totaled approximately 17,440 tCO2e, or approximately 2.0 %

				of our quantified 2021 total (17,440/863,114 = 2.02%).
Mergers	0	No change	0	This category did not materially impact our operations in 2022.
Change in output	2,680	Increased	0.3	Emissions associated with changes in output are evaluated on a BU x BU basis by multiplying the annual production change in BOE by the corresponding Scope 1 and 2 emissions intensity in tCO ₂ e/BOE. Applying this approach to the 2021 and 2022 production totals represents an overall emissions increase of approximately 2680 tCO ₂ e tonnes, or 0.3% of the quantified 2021 Scope 1 and 2 emission total (2681/863,114) = 0.31%).
Change in methodology	20,400	Decreased	2.4	<p>The following methodology or measurement changes occurred in 2022</p> <p>1. Emission Scope Change – D&C Fuels: Based on our interpretation of the GHG Protocol Corporate Accounting and Reporting Standard, and related guidance, including the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, we have moved fuel combustion emissions associated with third-party drilling, completions and workover activities from Scope 1 to Scope 3.</p> <p>2. Emission Scope Change – Owned and Operated Vehicles: Based on our interpretation of the GHG Protocol Corporate Accounting and Reporting Standard, and related guidance, including the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, we have moved fuel combustion emissions associated with owned and operated vehicles, including rental vehicles, from Scope 3 to Scope 1.</p>

				<p>3. Change in Global Warming Potentials: In line with the respective domestic country guidance, the global warming potentials used when estimating emissions associated with our Canada, France, Netherlands, German and Ireland business units were changed from the IPCC 4th Assessment Report (AR4) IPCC 5th Assessment Report (AR5) values (100 year).</p> <p>The combined total of the 2022 methodology changes represents approximately 20,400 tCO₂e or approximately 2.4 % of the reported 2022 Scope 1 and 2 emissions (20,403/863,114 = 2.36%).</p>
Change in boundary	0	No change	0	This category did not materially impact our operations in 2022.
Change in physical operating conditions	0	No change	0	This category did not materially impact our operations in 2022.
Unidentified	0	No change	0	This category did not materially impact our operations in 2022.
Other	0	No change	0	This category did not materially impact our operations in 2022.

C7.9b

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

Market-based

C8. Energy

C8.1

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

More than 20% but less than or equal to 25%

C8.2

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

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

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	1,229,775	1,229,775
Consumption of purchased or acquired electricity		203,642	345,549	549,191
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		203,642	1,575,324	1,778,966

C8.2b

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

	Indicate whether your organization undertakes this fuel application
--	---

Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

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

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Sustainable biomass was not consumed as a fuel in 2022.

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Other biomass was not consumed as a fuel in 2022.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Other renewable fuels were not consumed as a fuel in 2022.

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Coal was not consumed as a fuel in 2022.

Oil

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Oil was not consumed as a fuel in 2022.

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

1,128,141

MWh fuel consumed for self-generation of electricity

414,784

MWh fuel consumed for self-generation of heat

713,357

Comment

Natural gas was consumed as fuel in 2021.

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

Heating value

HHV

Total fuel MWh consumed by the organization

101,634

MWh fuel consumed for self-generation of electricity

80,985

MWh fuel consumed for self-generation of heat

20,649

Comment

Diesel, propane and gasoline were consumed as fuel in 2022.

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

1,229,775

MWh fuel consumed for self-generation of electricity

495,769

MWh fuel consumed for self-generation of heat

734,007

Comment

The total fuel consumption is equal to the total fuel consumption reference in 8.2a.

C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	164,217	164,217	0	0
Heat	654,290	654,290	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

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

Country/area of low-carbon energy consumption

Ireland

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Energy mix identified by provider (Naturgy) as 100% renewable.

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

533.8

Tracking instrument used

Other, please specify

(Monthly statements and annual Commission for Regulation of Utilities (CRU) fuel-mix disclosure and CO2 emission report)

Country/area of origin (generation) of the low-carbon energy or energy attribute

Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

100% of the electricity purchased by our Ireland business unit (IBU) in 2022 came from renewable energy sources.

Country/area of low-carbon energy consumption

Netherlands

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

80,381.9

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Netherlands

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

The origin country is identified in the GO as Europe AIB.

Country/area of low-carbon energy consumption

France

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Low-carbon energy mix, please specify

Low-carbon energy mix, please specify (Approximately 85.7% of the electricity purchased by our France business Unit (FBU) in 2021 was nuclear. Approximately 10.5% of the purchased electricity was renewable (including hydro).)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

162,752

Tracking instrument used

Other, please specify

(Grid mix information communicated by electricity provider (EDF))

Country/area of origin (generation) of the low-carbon energy or energy attribute

France

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Based on information published by the electricity provider (EDF) approximately 85.7% of the electricity purchased by our France business Unit (FBU) in 2022 was nuclear. Approximately 10.5% of the purchased electricity was renewable (including hydro).

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Canada

Consumption of purchased electricity (MWh)

312,580

Consumption of self-generated electricity (MWh)

131,448

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

314,726

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

758,754

Country/area

France

Consumption of purchased electricity (MWh)

132,341

Consumption of self-generated electricity (MWh)

0

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

1,783

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

134,124

Country/area

Netherlands

Consumption of purchased electricity (MWh)

80,382

Consumption of self-generated electricity (MWh)

0

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

17,252

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

97,634

Country/area

Australia

Consumption of purchased electricity (MWh)

132

Consumption of self-generated electricity (MWh)

17,709

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

121,977

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

139,818

Country/area

United States of America

Consumption of purchased electricity (MWh)

14,499

Consumption of self-generated electricity (MWh)

4,302

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

6,791

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

25,592

Country/area

Germany

Consumption of purchased electricity (MWh)

8,659

Consumption of self-generated electricity (MWh)

1,484

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

6,729

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

16,872

Country/area

Ireland

Consumption of purchased electricity (MWh)

534

Consumption of self-generated electricity (MWh)

9,273

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

185,031

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

194,838

Country/area

Hungary

Consumption of purchased electricity (MWh)

63.1

Consumption of self-generated electricity (MWh)

0

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

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

63.1

C9. Additional metrics

C9.1

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

C-OG9.2a

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

	In-year net production	Comment
Crude oil and condensate, million barrels	13.7	Total production of crude oil and condensate as reported in our 2022 annual report. For complete consolidated results, we encourage investors to review our financial reporting.
Natural gas liquids, million barrels	2.91	Total production of natural gas liquids as reported in our 2022 annual report. For complete consolidated results, we encourage investors to review our financial reporting.
Oil sands, million barrels (includes bitumen and synthetic crude)	0	Vermilion does not have bitumen or synthetic crude assets
Natural gas, billion cubic feet	86.94	Total production of natural gas as reported in our 2022 annual report. For complete consolidated results, we encourage investors to review our financial reporting.

C-OG9.2b

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

Estimated proved and proved plus probable reserves attributable to the assets as evaluated by GLJ Petroleum Consultants Ltd. in a report dated February 14, 2023 with an effective date of

December 31, 2022. Reserves for Australia, Canada, Croatia, France, Germany, Hungary, Ireland, Netherlands, and United States are established using deterministic methodology. Total proved reserves are established at the 90 percent probability (P90) level. There is a 90 percent probability that the actual reserves recovered will be equal to or greater than the P90 reserves. Total proved plus probable reserves are established at the 50 percent probability (P50) level. There is a 50 percent probability that the actual reserves recovered will be equal to or greater than the P50 reserves. The net total resource base includes the 2P reserves and a risked best estimate of the contingent and prospective resources. Vermilion does not complete a contingent and prospective resources assessment and thus no total resource base is included in this report.

C-OG9.2c

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

	Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)	Comment
Row 1	460.04		460.04	Reserves are net of royalty reserves, as reported in our Annual Information Form. Please note, that Vermilion does not report 3P reserves, contingent resources or prospective resources. For complete consolidated results, we encourage investors to review our financial reporting.

C-OG9.2d

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

	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Crude oil/ condensate/ natural gas liquids	58		58	Reserves are net of royalty reserves, as reported in our Annual Information Form. Please note, that Vermilion does not report 3P reserves, contingent resources or prospective resources.

				<p>The net total resources base is the total of the 2P reserves.</p> <p>For complete consolidated results, we encourage investors to review our financial reporting.</p>
Natural gas	42		42	<p>Reserves are net of royalty reserves, as reported in our Annual Information Form. Please note, that Vermilion does not report 3P reserves, contingent resources or prospective resources.</p> <p>For complete consolidated results, we encourage investors to review our financial reporting.</p>
Oil sands (includes bitumen and synthetic crude)	0	0	0	Vermilion does not have bitumen or synthetic crude assets.

C-OG9.2e

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

Development type

Onshore

In-year net production (%)

87

Net proved reserves (1P) (%)

85

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

81

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

Net total resource base (%)

81

Comment

Reserves are net of royalty reserves, as reported in our Annual Information Form. Please note, that Vermilion does not report 3P reserves, contingent resources or prospective resources. The net total resources base is the total of the 2P reserves. For complete consolidated results, we encourage investors to review our financial reporting.

Development type

Shallow-water

In-year net production (%)

5

Net proved reserves (1P) (%)

2

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

2

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

Net total resource base (%)

2

Comment

Reserves are net of royalty reserves, as reported in our Annual Information Form. Please note, that Vermilion does not report 3P reserves, contingent resources or prospective resources. The net total resources base is the total of the 2P reserves. For complete consolidated results, we encourage investors to review our financial reporting.

Development type

Deepwater

In-year net production (%)

5

Net proved reserves (1P) (%)

2

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

3

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

Net total resource base (%)

3

Comment

Reserves are net of royalty reserves, as reported in our Annual Information Form. Please note, that Vermilion does not report 3P reserves, contingent resources or prospective resources. The net total resources base is the total of the 2P reserves. For complete consolidated results, we encourage investors to review our financial reporting.

Development type

Tight/shale

In-year net production (%)

3

Net proved reserves (1P) (%)

11

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

14

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

Net total resource base (%)

14

Comment

Reserves are net of royalty reserves, as reported in our Annual Information Form. Please note, that Vermilion does not report 3P reserves, contingent resources or prospective resources. The net total resources base is the total of the 2P reserves. For complete consolidated results, we encourage investors to review our financial reporting.

C-OG9.5a/C-CO9.5a

(C-OG9.5a/C-CO9.5a) Break down, by fossil fuel expansion activity, your organization’s CAPEX in the reporting year and CAPEX planned over the next 5 years.

	CAPEX in the reporting year for this expansion activity (unit currency as selected in C0.4)	CAPEX in the reporting year for this expansion activity as % of total CAPEX in the reporting year	CAPEX planned over the next 5 years for this expansion activity as % of total CAPEX planned over the next 5 years	Explain your CAPEX calculations, including any assumptions
Exploration of new oil fields	0	0		The reported 2022 values are in alignment with our 2022 Annual Report. Our 5-year forecast is dynamic

				<p>and subject to change. As per our 2022 Annual Report, our total E&D capital guidance for 2023 is approximately \$570MM.</p> <p>The referenced CAPEX total includes expenditures related to maintenance of existing production infrastructure that may not directly contribute to a production increase.</p>
Exploration of new natural gas fields	22,666,000	4		<p>The reported 2022 values are in alignment with our 2022 Annual Report. Our 5-year forecast is dynamic and subject to change. As per our 2022 Annual Report, our total E&D capital guidance for 2023 is approximately \$570MM.</p> <p>The referenced CAPEX total includes expenditures related to maintenance of existing production infrastructure that may not directly contribute to a production increase.</p>
Expansion of existing oil fields	271,576,750	49		<p>The reported 2022 values are in alignment with our 2022 Annual Report. Our 5-year forecast is dynamic and subject to change. As per our 2022 Annual Report, our total E&D capital guidance for 2023 is approximately \$570MM.</p> <p>The referenced CAPEX total includes expenditures related to maintenance of existing production infrastructure that may not</p>

				directly contribute to a production increase.
Expansion of existing natural gas fields	256,479,250	47		<p>The reported 2022 values are in alignment with our 2022 Annual Report. Our 5-year forecast is dynamic and subject to change. As per our 2022 Annual Report, our total E&D capital guidance for 2023 is approximately \$570MM.</p> <p>The referenced CAPEX total includes expenditures related to maintenance of existing production infrastructure that may not directly contribute to a production increase.</p>

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

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

	Investment in low-carbon R&D	Comment
Row 1	Yes	<p>Current low emission R&D activities focus on: 1) Developing geothermal energy projects that leverage the heat contained in our produced water (France). Vermilion's petroleum extraction process produces a mix of oil, gas and water which is naturally heated to around 60°C. Once the oil and gas are separated out, the heated water enters a closed-loop system where heat exchangers transfer its caloric energy to a second water system belonging to our partners (while ensuring the two water systems never come into contact). Vermilion reuses the produced water by pumping it back underground to maintain reservoir pressures and enhance production. By demonstrating proof-of-concept, our partnership with tomato growers Tom d'Aqui in Parentis has been credited as being a catalyst for building an agriculture sector in this area independently of Vermilion. We provided a second example of this technology to heat an eco-neighbourhood in La Teste, and in 2021 established a third geothermal application; our Vic Bilh asset will provide geothermal heat to a nearby Fleur de Vie facility that produces high quality</p>

	<p>spirulina, a microalgae with a wide variety of uses and a fourth, providing heat to a college in Arcachon. 2) Developing biogas initiatives that feed biogas into existing pipeline gathering systems (Netherlands) 3) Our first use of an ORC turbine, in which a turbogenerator transforms thermal energy into mechanical energy (France). 4) Participation in Avenia, a multi-sector association in France with many programs related to supporting geothermal development and optimizing recovery from existing hydrocarbon reservoirs. We supported (with funding, expertise and marketing) an industry and country-wide study to identify the potential for waste energy use from oil and gas operations. 5) Participation in the Geothermal Forum in Germany provides a platform for the exchange and preparation of information for the geothermal industry 6) Our non-operating partnership in the Weyburn-Midale Carbon Capture and Storage facility in Saskatchewan, Canada, which is 1 of the world's largest CCUS projects. Our non-operated production from this enhanced oil recovery project was 1,784 bbls/d in 2022. 7) Researching the potential to use our existing infrastructure in France and Ireland for hydrogen applications.</p>
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C-CO9.6a/C-EU9.6a/C-OG9.6a

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

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)	Average % of total R&D investment planned over the next 5 years	Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Other, please specify Renewable Energy (geothermal)	Applied research and development				Vermilion is an active participant on the H2020 MEET project whose objective is to demonstrate the geothermal potential of Europe in different geological settings to ensure replicability of solutions and to attract investors in agreement with our ESG roadmap. The applied research and development part

					of this project consists of mapping thermal resource from oil facilities, searching and mapping end users with heat demand, de-risking (thermal modeling, corrosion and scaling study), and testing Rankin thermodynamic cycles for electricity production at low temperature.
Other, please specify Renewal Energy (geothermal)	Small scale commercial deployment				Developing geothermal energy projects that leverage the heat contained in our produced water (France). Vermilion's petroleum extraction process produces a mix of oil, gas and water which is naturally heated to around 60°C. Once the oil and gas are separated out, the heated water enters a closed-loop system where heat exchangers transfer its caloric energy to a second water system belonging to our partners (while ensuring the two water systems never come into contact). Vermilion reuses the produced water by pumping it back underground to maintain reservoir pressures and enhance production. By demonstrating proof-of-concept, our partnership with tomato

					<p>growers Tom d'Aqui in Parentis has been credited as being a catalyst for new projects launched independently of Vermilion, along with 3 additional applications within Vermilion partnerships. We provided a second example of this technology to heat an eco-neighbourhood in La Teste, and in 2021 established a third geothermal application; our Vic Bilh asset will provide geothermal heat to a nearby Fleur de Vie facility that produces high quality spirulina, a microalgae with a wide variety of uses and a fourth, providing heat to a college in Arcachon.</p>
<p>Other, please specify Renewal Energy (geothermal)</p>	<p>Applied research and development</p>				<p>Participation in Avenia, a multi-sector association in France with many programs related to supporting geothermal development and optimizing recovery from existing hydrocarbon reservoirs. We supported (with funding, expertise and marketing) an industry and country-wide study to identify the potential for waste energy use from oil and gas operations.</p>

Hydrogen	Applied research and development				We are a partner in Hylight, a 3-year project in Ireland that aims to provide the knowledge, data and tools to guide the cost-effective decarbonisation and roadmaps for sustainable large-scale implementation of hydrogen technologies.
Other, please specify Renewable Energy (biogas)	Small scale commercial deployment				In Harlingen, we have partnered with SPF Group, a producer of sustainable fuels, to investigate the use of our Harlingen Treatment Centre location for their biogas production site. The location includes a quay, which makes it possible to receive raw materials via water, thereby limiting truck transportation, and it offers existing buildings instead of new builds, which supports the sustainability principle that all parties involved are pursuing. It can also make use of Vermilion's extensive gas infrastructure there. As of June 2022, SPF Group has located their head office at our location.
Hydrogen	Applied research and development				In France, we are partnering with an external company to research the potential to sequester carbon

					during the process of producing hydrogen.
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C-OG9.7

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

16.56

C10. Verification

C10.1

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

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

C10.1a

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

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 02_VerificationLetter_2022_R0.pdf

Page/ section reference

Page 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

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

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 02_VerificationLetter_2022_R0.pdf

Page/ section reference

Page 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 02_VerificationLetter_2022_R0.pdf

Page/ section reference

Page 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

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

Scope 3 category

- Scope 3: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting
- Scope 3: Upstream leased assets
- Scope 3: Investments
- Scope 3: Downstream transportation and distribution
- Scope 3: Processing of sold products
- Scope 3: Use of sold products
- Scope 3: End-of-life treatment of sold products
- Scope 3: Downstream leased assets
- Scope 3: Franchises

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 02_VerificationLetter_2022_R0.pdf

Page/section reference

Page 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

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

Yes

C10.2a

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

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C7. Emissions breakdown	Year on year change in emissions (Scope 1 and 2)	The 2022 and prior year (2021) variations were completed to ISO 14064-3	For consistency, Vermilion maintains our verification process year-over-year. For 2021 and 2020 , this included the same verification team, support of the verification data, and changes in emissions year-over-year. See attached verification statement.

C11. Carbon pricing

C11.1

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

Yes

C11.1a

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

BC carbon tax

EU ETS

Ireland carbon tax

Other carbon tax, please specify

Alberta Technology, Innovation & Emissions Reduction (TIER) Regulation
Other carbon tax, please specify
Saskatchewan Output Based Pricing System

C11.1b

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

EU ETS

% of Scope 1 emissions covered by the ETS

6.8

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

8,293

Allowances purchased

33,363

Verified Scope 1 emissions in metric tons CO₂e

41,656

Verified Scope 2 emissions in metric tons CO₂e

0

Details of ownership

Facilities we own and operate

Comment

Vermilion's Ireland Business Unit is subject to the EU ETS.

C11.1c

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

BC carbon tax

Period start date

January 1, 2022

Period end date

December 31, 2022

% of total Scope 1 emissions covered by tax

2.3

Total cost of tax paid

683,635

Comment

Vermilion's British Columbia (Canada) operations are subject to the BC carbon tax.

Ireland carbon tax

Period start date

January 1, 2022

Period end date

December 31, 2022

% of total Scope 1 emissions covered by tax

6.8

Total cost of tax paid

155,200

Comment

Vermilion's Ireland operations are subject to the Ireland carbon tax.

Other carbon tax, please specify

Period start date

January 1, 2022

Period end date

December 31, 2022

% of total Scope 1 emissions covered by tax

31.6

Total cost of tax paid

425,000

Comment

Vermilion's Alberta (Canada) operations are subject to the Technology Innovation & Emissions Reduction (TIER) Regulation.

Our 2022 TIER verification audit is in progress. The total cost of tax paid is an estimate and subject to the audit results.

The % of total Scope 1 emissions covered by tax is also an interim value and represents

the total Alberta Scope 1 emissions as a percentage of the Corporate Scope 1 total.

Other carbon tax, please specify

Period start date

January 1, 2022

Period end date

December 31, 2022

% of total Scope 1 emissions covered by tax

32.1

Total cost of tax paid

594,000

Comment

Vermilion's Saskatchewan (Canada) operations are subject to the Saskatchewan Output Based Pricing System (OBPS).

Our 2022 OBPS verification audit is in progress. The total cost of tax paid is an estimate and subject to the audit results.

The % of total Scope 1 emissions covered by tax is also an interim value and represents the total Saskatchewan Scope 1 emissions as a percentage of the Corporate Scope 1 total.

C11.1d

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

Our strategy to comply with the systems we are regulated by involves both financial and strategic planning considerations. Our exposure in Canada is mitigated by provincial responses to the federal Act, including Alberta's Technology Innovation and Emissions Reduction (TIER) regulation and Saskatchewan's Output-Based Pricing System (OBPS). Vermilion has voluntarily opted into both programs, which provides tax exemptions contingent on emissions reduction. However, these programs will evolve with the federal approach, with emission reduction requirements becoming more stringent over time.

Strategically, we will also continue to reduce the energy and emissions intensity of our operations, supporting our carbon strategy's emission reduction targets (2025 and 2050). We will do this by 1) Using our Emissions Long Range Planning Tool to establish the tax reductions available compared to carbon abatement costs, analyze potential acquisitions and divestments, and allocate capital to emissions reduction projects; 2) Developing a net zero plan in 2022/2023 to support our net zero by 2050 target, with business unit and operational input; 3) Tracking evolving taxation requirements; and, 4) Engaging external and in-house experts to support tax

strategy development, including accepting the tax expense where carbon abatement costs are uneconomical .

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

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

Yes

C11.3a

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

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme

Alignment with the price of a carbon tax

Price/cost of voluntary carbon offset credits

Cost of required measures to achieve emissions reduction targets

Objective(s) for implementing this internal carbon price

Change internal behavior

Drive energy efficiency

Drive low-carbon investment

Identify and seize low-carbon opportunities

Navigate GHG regulations

Stakeholder expectations

Scope(s) covered

Scope 1

Scope 2

Pricing approach used – spatial variance

Differentiated

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

Carbon taxes are set to increase in several of our jurisdictions, resulting in increasing costs. The Canadian Federal Greenhouse Gas Pollution Pricing Act, established in 2019, has set carbon tax rates at \$50 per tCO₂e in 2022, with progressive escalations to \$170 by 2030. The EU Emissions Trading Scheme cap and trade system, which applies to our Ireland business unit (IBU), requires users to acquire carbon allowances to account for their emissions. In 2022, the average purchased allowance cost for IBU was approximately €80/tonne. The IBU national carbon tax was €41 in 2022, increasing by €7.50/t annually to 2030. The new German Fuel Emission Trading Act (BEHG) requirements, established in 2021, will impact our GBU operations with a fixed cost of €35/t in 2023, increasing to €65/t by 2026, with market pricing thereafter.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO₂e)

50

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO₂e)

200

Business decision-making processes this internal carbon price is applied to

- Capital expenditure
- Operations
- Procurement
- Product and R&D
- Risk management
- Opportunity management
- Value chain engagement
- Public policy engagement

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify
acquisition and divestment; abatement cost curves of various emission reduction projects

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

In Canada, this price is used to compare alternatives for emission reduction projects; we have also used it to determine the impacts of various acquisition and divestment scenarios.

C12. Engagement

C12.1

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

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

C12.1a

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

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

% of suppliers by number

60

% total procurement spend (direct and indirect)

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

Rationale for the coverage of your engagement

This is an extension of our current approach to supplier engagement, which includes working with specific suppliers to improve climate change management, and to better understand potential risks and opportunities. Through our third-party compliance system in our Canada and US Business Units, approximately 60% of our suppliers in these business units have been engaged on providing climate-related risk information. Questions include: Has Your Company Identified Its Sources Of Direct And Indirect GHG Emissions; what types of fuels are used; does your company track and report on GHG emissions; what are your sources of Scope 1, 2 and 3 emissions; have you developed a strategy to reduce GHG emissions; do you track ozone-depleting substances; quantify use or generation of energy from renewable and non-renewable sources; plans for implementing energy efficiency strategies; plans to advance the use of renewable resources such as solar; and all related energy and emissions data. This constitutes another step in greater direct supplier engagement on climate-related issues, and focuses on the Canada Business Unit, where our emissions intensity is highest, and where our use of third party supplier compliance systems enables us to leverage existing supplier questionnaires. This questionnaire will be updated annually, and reviewed by our HSE and sustainability teams to identify opportunities for further engagement and improvement over time. We have expanded this external supplier engagement while reviewing our own emissions and intensity, and to demonstrate our own performance via CDP Climate submissions. We believe this is providing a solid foundation for data gathering from suppliers, and helps to guide the data and information requests that we make of them.

Impact of engagement, including measures of success

The most important impact of our engagement on climate is 100% compliance with climate-related regulations in our operating areas, which has a direct impact on our Vermilion Energy Inc. CDP Climate Change Questionnaire company reputation, and on reducing the risks associated with water use and availability for Vermilion and for our stakeholders. Based on the third-party supply chain questionnaire, we are able to further identify suppliers' level of climate and water risk management, and identify metrics such as the percentage of respondents responding to the climate questions (93%), the percentage reporting climate data (and the percentage with climate and water management plans in place). Based on where the supplier is operating and the level of criticality to our operations, this provides additional information to help support our 100% compliance with climate and water-related regulations, and our sustainability strategy's focus on emissions and water efficiency and reduction. In addition, Vermilion engages many of our suppliers and all of our contractors relating to safe and efficient completion of the approved scope of work. The current focus of this engagement is optimization of resources to reduce the impact and exposure, both from a health, safety and environment perspective, as well as emissions and water impact perspective.

Comment

C12.1b

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

Type of engagement & Details of engagement

Education/information sharing

Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number

100

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

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

Since we don't have downstream oil and gas operations, our customers are not traditional consumers; they are instead markets that include North American-based midstream and downstream refiners, Asia Pacific-based refining and lubricant businesses, European downstream refiners, and key aggregators and utilities, such as the 50% state-owned GasTerra in The Netherlands. In some cases, we are mandated to provide products through specific customers (such as GasTerra); in others, there is a transparent and competitive process in which potential customers bid for those

products. Our goals for engaging with these entities in our value chain is to (a) ensure they are aware of our commitment to and reputation for ESG issues, including climate change, and (b) by asking for details about their commitment, encourage their own activities to reduce climate change impacts. Our Marketing department has established an ESG section in our communications with potential customers, including requests for proposal, tenders and bid documents. This establishes our commitment to ESG, including climate issues, and requests that entities wishing to purchase our products include information about their commitment to ESG as part of bid packages. This enables us to use the customer-provided ESG information as part of the assessment of the bid packages, including the comparison between bidders. At the same time, it raises awareness with these customers – whether they are successful bidders or not – about the growing criticality of these commitments and associated activities.

Impact of engagement, including measures of success

Our measures of success include the number of customers (and potential customers) that we communicate with on ESG commitments, including climate change – this is our input measure. We are also tracking the number of potential customers that respond with their ESG commitment – this is our output measure. As the initiative further develops, we anticipate being able to use outcome measures, such as number of successful bids for which ESG commitments made a material difference, and the potential for developing partnerships based on a mutual recognition of the importance of ESG, particularly climate change, and tracking the results from those partnerships. We anticipate using these results to further communicate with our potential and actual customers. The current impact is that 100% of all new tenders/requests for proposals or bids, etc. for our crude oil and gas marketing in 2022 include our ESG commitment and request information on the potential customer's commitment. We are tracking the number of bids that return with ESG and climate information included, and comparing this for top candidates to the companies' externally communicated ESG and climate information. This provides an assessment of how many companies are responding to our request, and provides an opportunity for further engagement with them on ESG and climate matters.

C12.1d

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

One of Vermilion's defining strengths is our belief that sharing or success is essential to being a success. We have embedded this philosophy in our mission and we continue to live it today. Our objective is to ensure that our stakeholders, shareholders, employees, communities and partners benefit from our achievements. This approach, based on the concepts of inclusive and sustainable growth, frames our business strategy and guides our role in the energy transition. Vermilion engages our value chain in many ways, one of which is with other companies that are part of our sector. This is important to us because these companies may be our partners or potential partners in our operating areas, and because they are part of our industry sector, and our collective performance on climate issues as an industry is an essential part of the successful energy transition. As a case study, our formal engagement in this regard is as an

active participant in a sustainability leadership working group comprised of other companies in the energy industry in Alberta, based in Calgary. This group meets bi-monthly to discuss such issues as challenges, innovation, solutions and best practices regarding sustainability, particularly with respect to climate change and greenhouse gas emissions. Subjects have covered such issues as reporting best practices, methane reduction, systems thinking, collaborative innovation, climate change and GHG reduction case studies from leading companies. The subjects are led each meeting by one of the companies that has a challenge or initiative they wish to engage the group on. In addition, an annual longer workshop expands the work and scope of this member-driven working group to the wider industry at no charge, with the specific intent of sharing best practices and open dialogue that will raise the bar for the entire industry. Outputs include discussion records collated to create living documents housed online that form an ongoing resource for best practices and ideas, and the ability to reach out to this group with questions for the members at any time between meetings.

Vermilion chaired this group in 2016-2017 and continues to be an active member. We have prioritized this method of engagement as directly applicable to our industry, producing ideas and solutions that can be immediately trialed or implemented within the company. One of the ongoing focuses for the group is supply chain, as many of our member companies are either engaging with, development engagement plans, or working to understand how to engage the supply chain, which is the natural extension of this collaborative work. One example of success is the linkage through members of this group this year to an external ESG- and climate-focused initiative that is aiming to standardize reporting on ESG and climate change such as GHG emissions for the oil and gas industry. This is a particular challenge for the industry, given the differences between reporting boundaries and company-specific definitions and approaches. Alignment between other companies in the sector will provide better comparability between companies, better performance assessments, and more decision-useful information for investors and other stakeholders.

We engage with the public by communicating our emission reduction activities through publications and voluntary reporting (such as CDP and our Corporate Sustainability Report). We engage with our employees on Sustainability and emissions performance at quarterly town hall meetings where we review our six strategic objectives, including Integrated Sustainability. Measures of success on supply chain engagement initiatives will be initiative-specific (i.e. a project-specific emissions reduction target). This is an area that will continue to be developed as Vermilion's Sustainability strategy evolves. Vermilion prioritizes engagement based on the potential for collaborative identification of emission reduction potential, as well as potential effect on Vermilion's brand and license to operate.

Vermilion, on an ongoing basis, looks for opportunities to engage a larger percentage of our value chain based on potential impact of the engagement. Vermilion also engages partners in the value chain where the partner has a specific interest (i.e. investor interest group). In addition, Vermilion is actively working with customers who are developing their own frameworks to assess sustainability, with a view to qualifying as responsible suppliers of natural gas. We also engage with our governments and regulatory authorities on climate change through our business development activities. For example, we include ESG and climate issues and performance in our bid documents, and actively discuss our performance as part of the bid process, establishing not only our own credentials in this area, but the importance of considering this as a comparator between companies to help advance country performance on NDCs related to the Paris Agreement.

C12.2

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

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

C12.3

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

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

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

Yes

Attach commitment or position statement(s)

<https://www.vermilionenergy.com/sustainability/our-energy-transition/external-associations-initiatives-and-advocacy/>

Climate Position

Vermilion supports the goals of the Paris Agreement and governments' actions, including public policies, to develop and implement related climate change policy and regulation, while recognizing the critical role that oil and natural gas will play during the energy transition to ensure accessible and affordable energy supplies.

While oil and gas resources are still needed during the energy transition, the provision of clear, stable and reasonable regulations will allow energy producers such as Vermilion to continue to operate in an environmentally and socially responsible manner.

We believe that domestic energy supply should be prioritized over importing oil and gas,

for its contributions to national energy security, the economic benefits it provides to local communities through employment and local investment, its compliance with stringent safety, environmental and workplace regulations, and the lower carbon footprint it often provides.

In 2023, we implemented our lobbying policy, which describes our management system for direct and indirect (trade and industry association) advocacy.

Governance: Each business unit leader is responsible for positions and activities in their region; Vermilion's Executive Committee is responsible for corporate positions and company-wide lobbying activities. Only those individuals specifically designated as spokespersons or representatives may advocate on behalf of the company.

Summary of Advocacy Positions Global

Support for the role of responsibly produced oil and natural gas to provide affordable and dependable energy as a bridge to greater reliance on renewable fuels; opposition to the European Union Solidarity Contribution as not following EU policy, unfairly and retroactively targeting a single sector and disregarding the risk and reward relationship for hydrocarbon producers and the low European natural gas pricing since 2015 and particularly in 2020.

France

Support for the transformation of extractive sectors to serve our regions.

Netherlands

Advocacy for the role of small natural gas fields during the energy transition, including government adherence to legal timelines for permitting, and distribution of royalties to local communities.

Ireland

Support for the role of natural gas in improving domestic energy security during the energy transition, including as lower carbon than imported gas, for the government's 2050 net zero carbon targets, and for the potential use of our infrastructure for blue or green hydrogen.

Germany

Completed working with government and the extractive industry to support a new regulatory approach to working in water protection zones; finalized working with industry and ministries on new deep drilling regulation.

Central & Eastern Europe

Advocacy for permitting and progressing projects in a timely fashion.

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Review Process: We annually review our direct lobbying activities, including any required advocacy registries: carbon footprint it often provides.

France: The High Authority for the Transparency of Public Life Report.

Ireland: Quarterly reporting to the Register of Lobbying.

We also annually review all trade and industry associations to which we belong, for alignment of activities and organizations with the Paris Agreement and with our Climate Position. We use a scale between fully aligned and misaligned for each. If misalignments are identified, we engage with the association to understand and influence the issue. We consider cancelling membership only if no improvement proves likely.

Results: In 2022, two associations had no commitment or equivalent to the Paris agreement, one of which also had lobbying activities misaligned with Paris. We are engaging with one association, and considering membership withdrawal in the other.

Fees paid in 2022 included:

External lobbyists: \$78,000;

Memberships in associations that also lobby: \$1.26 million.

We provide our Executive Committee and Board of Directors with a report summarizing our reviews, including misalignment and recommendations.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

C12.3b

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

C12.4

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

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

Page/Section reference

Document is too large to attach: URL is here <https://www.vermilionenergy.com/agm/wp-content/uploads/sites/10/2023/05/2023-Information-Circular.pdf>

Pages 21-24

Content elements

Governance

Comment

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

Page/Section reference

Document is too large to attach; URL is here: <https://www.vermilionenergy.com/wp-content/uploads/2023/03/VEI-2022-Annual-Report.pdf>

Pages 45-53

Content elements

Strategy
Emissions figures
Emission targets

Other metrics

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

Page/Section reference

Document is too large to attach; URL is here:
<https://www.vermilionenergy.com/sustainability/wp-content/uploads/sites/6/2023/08/2023-Full-Sustainability-Report-compressed.pdf>

Content elements

- Governance
- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics
- Other, please specify
 Wide range of sustainability factors, qualitative and quantitative

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1		

C15. Biodiversity

C15.1

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

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	<p>Sustainability is 1 of 6 strategic objectives in our long-range business plan. As such, the Board has responsibility for oversight of Vermilion’s sustainability performance, with Board committees providing additional expertise.</p> <p>Comprised of 5 independent directors, the Board’s Sustainability Committee (SC) provides targeted oversight of & advice for our approach, including: Sustainability Policy & long-range strategic plan; performance & progress on sustainability goals; id & mgmt of sustainability risks and opportunities; impact of sustainability & climate issues, including water, on business strategy, budgets & risk management; & communication of sustainability policies & performance. At least quarterly, the SC reviews management’s sustainability performance reports, which include ESG & climate risks, opportunities, activities & performance; environmental & social trends including biodiversity; & strategic community investment activities.</p> <p>The SC Chair reports to the Board on the SC’s work, including the Company’s performance & progress. Most members of the full Board attended SC meetings in 2021, & the Board also reviewed ESG thought leadership papers such as oversight frameworks, decarbonization pathways & managing the energy transition, from experts eg McKinsey, State Street & Kimmeridge Energy. The Board also oversees sustainability strategy & performance via the HSE Committee (environment & safety, risk management), Audit Committee (risk management), & GHR Committee (governance & people).</p> <p>The Board & SC use this info to ensure integration of sustainability & climate risks & opportunities, including water, into major decisions, such as long-range planning, budget and</p>

		capital allocation, and mergers, acquisitions and divestments. In 2021 the Board reviewed the 10-year sustainability strategy for managing risks and opportunities identified under each strategy pillar of carbon, conservation (including water and biodiversity, and reviewed the execution of a significant business unit Biodiversity Action Plan, and Vermilion's certifications under third-party agencies such as Equitable Origin, which includes biodiversity issues.
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C15.2

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

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to Net Positive Gain Commitment to No Net Loss Adoption of the mitigation hierarchy approach	SDG Other, please specify Natura 2000 in France

C15.3

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

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

Not assessed

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Other, please specify Species monitoring

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
Other, please specify Corrib Biodiversity Action Plans	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators Risks and opportunities Biodiversity strategy	Too large to attach https://www.vermilionenergy.com//ie/wp-content/uploads/sites/8/2023/01/VER-BiodiversityPlan-FULL-Apr21-v14-web-1.pdf Full document

C16. Signoff

C-FI

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

C16.1

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

	Job title	Corresponding job category
Row 1	Vice President, Sustainability	Other, please specify Vice President, Sustainability

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	3,415,211

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

Not applicable at this time.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Doing so would require we disclose business sensitive/proprietary information	Direct engagement with customers in relation to specific information requests.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

Not at this time; however, we are open to engaging one a one-to-one basis when requested.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms