



**VALUES MATTER** | 2018 SUSTAINABILITY REPORT  
Excellence. Trust. Respect. Responsibility.

VERMILION  
ENERGY



THE GLOBAL GOALS  
For Sustainable Development



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## Message from our Chief Executive Officer



**Anthony Marino**  
President and CEO

Over the past decade, Vermilion Energy has consciously pursued the integration of environmental and social sustainability into our mission to be the “Best Energy Company in the World.” This focus on sustainability has grown substantially over the past five years, to the extent that I can now proudly state that sustainability – environmental, social, and economic – lies at the heart of our company’s strategy.

Our objective is to deliver responsibly-produced energy to meet the world’s evolving needs. Implicit in this objective is doing what we can to meet the needs of our broadly defined stakeholders, ranging from our shareholders to our communities to our global environment. We are determined that the work that we do to serve these stakeholders will be delivered within the context of our four core values of Excellence, Trust, Respect, and Responsibility.

This is why we have positioned Vermilion purposefully within the energy transition, seeking to have our energy and creativity build a better future for our stakeholders through enhanced economic, environmental and community wellbeing. I know that our worldwide staff – now numbering in excess of 1,000 dedicated individuals – has a growing commitment to this honorable task. Our employees and contractors recognize that we can and must meet both internal business objectives and those of our broad stakeholder group, and that our business success and our stakeholders’ success are inextricably linked and mutually reinforcing.

It is therefore critical that we work with our government and community stakeholders to employ our oil and gas assets as strategic resources. Predictions differ about the precise manner and pace of the energy transition. Nonetheless, our own scenario analyses make it clear that Vermilion can best contribute by focusing on producing energy safely and responsibly – and also reliably and cost-effectively. We are already deploying our strategic oil and gas resources in the service of the energy transition and, indeed, the even more fundamental framework for our planet’s health and wellbeing represented by the United Nations Sustainable Development Goals (SDGs). I want to relate a few examples of how we are successfully achieving this dual aim of serving both the energy transition and the SDGs.

We are expanding our development of geothermal-related energy, actively working with community partners to leverage traditional oil and gas assets not only for environmental benefits, but for social benefits as well. In France, we are providing heat from the produced water in our oil operations to develop sustainable agriculture and residential projects. Our first energy-recycling sustainability project, launched more than 10 years ago, jump-started a new tomato industry in a region underserved by capital investment.



Our energy-reclaiming community-building projects – one underway and one in the planning process – specifically target economic inclusivity in the form of social housing: 30% of residences in the first project, and all residences in the new one, are reserved for those with lower incomes. In the Netherlands, we are continuing to develop a project to convert depleted gas wells to geothermal assets, supplying energy to a sustainable and scalable agriculture center.

These partnerships simultaneously reduce carbon emissions, contribute to community development, and support co-industries that should endure even after the energy transition is complete. We are proud to be a central contributor to these economic and social success stories, which positively impact several interconnected SDGs: SDG 7 on Affordable and Clean Energy, SDG 8 on Decent Work and Economic Growth, SDG 10 on Industry, Innovation and Infrastructure, and SDG 13 on Climate Change.

At the same time, we are focused on developing our oil and gas assets in North America, Europe and Australia with simultaneously positive economic and environmental impacts, by applying our expertise in mature field renewal. As an example, after we purchased the assets of a private company in southeast Saskatchewan in 2014, we spent the next two years collaborating with industry partners to capture previously flared or vented natural gas. The result was a 75% reduction in emissions at these locations between 2014 and 2016. We are now using the same best-in-class approach on an even larger scale to reduce emissions from additional Saskatchewan assets that we acquired as part of our merger with Spartan Energy in 2018.

These are examples of the content throughout this report, in which we have noted the projects and programs that are reducing our emissions while providing more energy to the world's growing and increasingly prosperous population. We are very happy that for a third consecutive year, we have reduced absolute emissions while still increasing energy production. We strongly believe, and contend that we have demonstrated, that there is a real correlation between sustainability performance and value creation for shareholders. In fact, we believe that this correlation reflects causation and intention. This is because our Integrated Sustainability strategic objective requires unceasing discipline and innovation in our investment decisions and operations.

Reducing fossil fuel consumption while producing energy is a form of both energy efficiency and waste reduction, and is the right thing to do. We believe that our approach of lowering carbon emissions while improving the economic performance of our assets supports multiple desirable objectives: long-term economic viability of our company, preservation of employment and contracting opportunities, and climate stabilization.

Supporting the communities in which we live and work is also the right thing to do. Our focus on environmental improvements is mirrored in our Strategic Community Investment program, called Ways of Caring, which emphasizes employee volunteer time as well as company financial contributions. In just one example this year, 112 of our staff provided 562 hours to Wood's Homes in our headquarters city of Calgary, Alberta. We assisted with landscaping, painting, furniture moving, window cleaning, and food preparation for their new Inglewood Campus, which has now opened its welcoming doors to Calgary's homeless and at-risk youth. We have also implemented a worldwide program for Emergency Response, with flagship programs in each of our eight business units to assist with public and worker safety. This program improves the safety not only of Vermilion's workers, but also of all members of the communities in which we operate.

We do not take our mission to be the "Best Energy Company in the World" lightly. This is why, as we increase our market share in global energy production through a disciplined approach to long-term growth, we also seek to improve the environmental and social performance of the energy sector overall by raising the bar for Best-In-Class sustainability performance. We call on you – our investors, communities, and governments – to work with us to share and support our commitment to deliver energy in an increasingly sustainable manner.



Anthony Marino

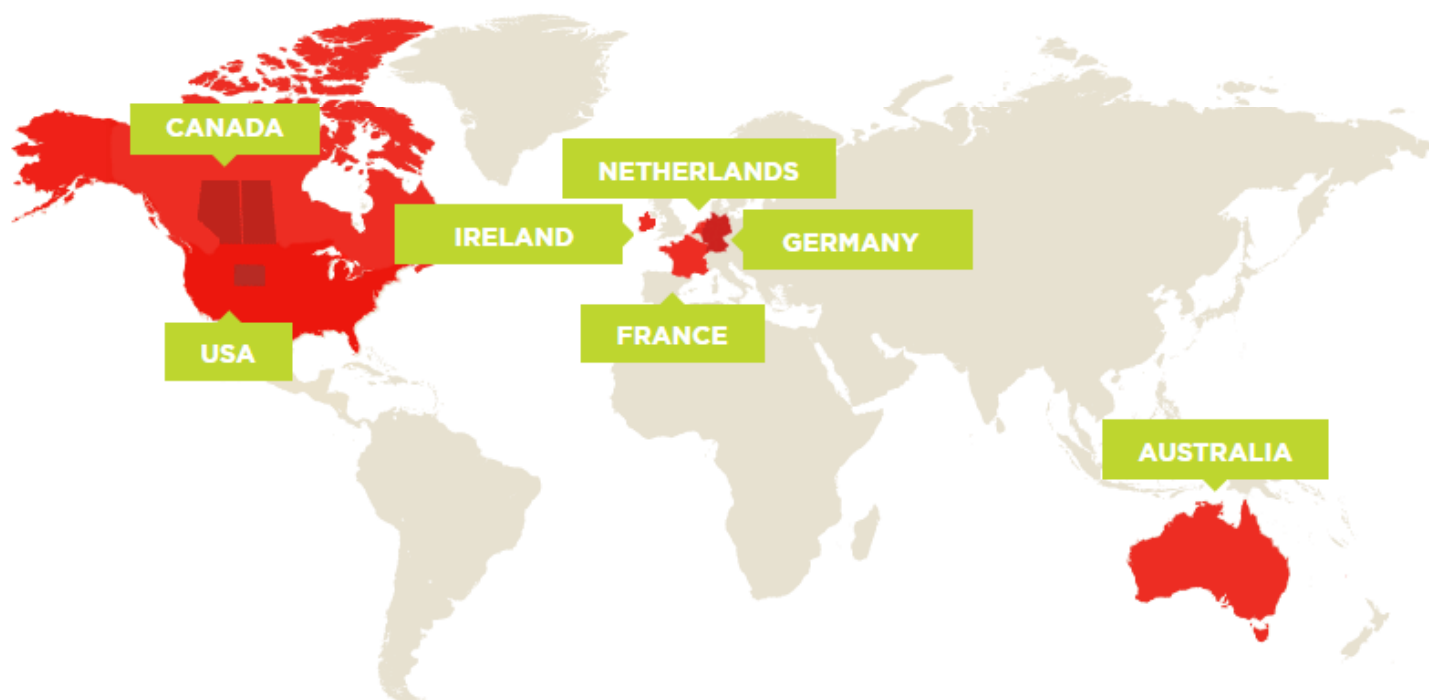
## Economic & Operational Highlights

In 2017, Vermilion: 102-7, 201-1

- › Produced almost **25 million boe** of oil and gas
- › Generated net revenue of approximately **\$1 billion**
- › Paid close to **\$138 million** in wages and benefits to our employees
- › Distributed more than **\$311 million** in dividends to our shareholders
- › Paid close to **\$107 million** in taxes and royalties in our operating jurisdictions
- › Invested more than **\$1.8 million** in community support
- › Devoted almost **\$27 million** to protecting our environment

### 8.1 Sustain per capita economic growth

We continued to responsibly increase production (7% between 2016 and 2017) using a stable, long-term growth model, while supporting our stakeholders: investors, staff, governments, communities and suppliers.



## Canada

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Production	<b>29,510</b> boe/d
Staff	<b>270</b>
Net Revenue	<b>\$297.6</b> MM
Reserves	<b>139,209</b> Mboe

## The Netherlands

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Production	<b>6,847</b> boe/d
Staff	<b>100</b>
Net Revenue	<b>\$106.3</b> MM
Reserves	<b>17,863</b> Mboe

## France

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Production	<b>11,085</b> boe/d
Staff	<b>166</b>
Net Revenue	<b>\$239.5</b> MM
Reserves	<b>64,188</b> Mboe

## Australia

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Production	<b>5,770</b> boe/d
Staff	<b>92</b>
Net Revenue	<b>\$154.4</b> MM
Reserves	<b>15,565</b> Mboe

## United States

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Production	<b>781</b> boe/d
Staff	<b>11</b>
Net Revenue	<b>\$11.1</b> MM
Reserves	<b>14,970</b> Mboe

## Germany

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Production	<b>4,291</b> boe/d
Staff	<b>37</b>
Net Revenue	<b>\$62.0</b> MM
Reserves	<b>24,496</b> Mboe

## Ireland

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Production	<b>9,737</b> boe/d
Staff	<b>-</b>
Net Revenue	<b>\$153.3</b> MM
Reserves	<b>22,199</b> Mboe

Note: net revenues = sales less royalties | staff = employees + contractors | reserves = proved + probable



# Our Approach to Business

## About Vermilion

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Vermilion is a publicly traded, widely held, international energy producer that seeks to create value through the acquisition, exploration, development and optimization of producing properties in North America, Europe and Australia. Founded in 1994, we have been delivering outstanding financial and operational performance for nearly 25 years.

At the core of our business is our purpose: we believe that producing energy for the many people and businesses that rely upon it to meet their daily needs and sustain their quality of life is both a great privilege and a great responsibility.

Vermilion is part of the energy transition that is currently occurring. Our strategy focuses on reducing the environmental impacts of traditional energy production while developing renewable energy projects closely related to our core competencies. We believe that sustainability-oriented investors, governments and citizens will effect their greatest positive impact by turning to Best-In-Class operators like Vermilion during the transition.

## Our Approach

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Vermilion is headquartered in Calgary, Alberta, Canada, with onshore and offshore operations located around the world in regions noted for their stable, well-developed fiscal and regulatory policies related to oil and gas exploration and development.

Our approach to sustainability, and to our business in general, is to 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.

This is reflected in our recognition as a top decile performer amongst Canadian publicly listed companies in governance practices, as a 2016 Climate "A" List performer by CDP, and our regular appearances as a Best Workplace in the Great Place to Work® Institute's annual rankings in Canada, France, The Netherlands and Germany. In addition, we emphasize strategic community investment in each of our operating areas.

We believe that this approach is an integral part of our company's success, and is closely aligned with the ideals and goals expressed in the Sustainable Development Goals, which you will see us refer to throughout this report.<sup>102-15</sup>

Our business model focuses on annual organic production growth, along with providing a reliable, increasing dividend, and generating strong returns from accretive acquisitions. In 2018, we are targeting production of

86,000 to 90,000 boe/d (approximately 29% growth over 2017), primarily through:

- Developing light oil and liquids-rich natural gas conventional resource plays in Canada and the United States
- Exploring and developing high value natural gas opportunities in The Netherlands, Germany and our new business unit in Central and Eastern Europe, consisting of Hungary, Slovakia and Croatia
- Oil drilling and workover programs in France and Australia, and
- Our 18.5% non-operated working interest in the Corrib gas field in Ireland.

Vermilion's asset base comprises a diversified product and project portfolio that receives premium pricing. This increases the stability of our cash flows and our flexibility in allocating our exploration and development capital. The result is a consistently strong return on capital, reliable growth, and exposure to robust end 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.<sup>102-6</sup>

Our success is made possible by the superlative efforts of more than 900 staff (employees and contractors, as of August 2018) located throughout our operations, and through an extensive supply chain.

In 2017, our supply chain represented more than 6,157 entities and an investment from Vermilion of more than \$588 million. This encompassed a wide range of inputs, including specialized field expertise and technology, supplies ranging from drilling mud to event facilities, and expert consultant advice. It is extremely important to us that our suppliers not only deliver a sound financial investment in their goods and services, but operate in a manner that aligns with the values that guide our own corporate culture. As a result, we have strict requirements for third-party vendors who do business for Vermilion.<sup>102-29</sup>

## Management and Evaluation

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Vermilion's Strategic Plan includes six key Strategic Objectives:

- Extraordinary People
- Best in Class Health, Safety and Environment
- Top Quartile Shareholder Returns
- Robust Portfolio
- Operational Excellence
- Integrated Sustainability

These objectives provide short, mid- and long term targets for the company as a whole, and for our staff. We set annual commitments within each of the objectives, and track our achievements against these quarterly,

reporting to the senior management team and our Board of Directors. Progress is reported on annually in our Information Circular, and is also tracked using key performance indicators within our Short and Long Term Scorecards to assess company and individual performance, which is linked directly to compensation.

In addition to economic and investment metrics, we analyze external stakeholder feedback, including external recognition (listed in detail in the [Awards](#) section of this report), voting results at our Annual General Meeting, and input from governance, investment and sustainability analysts, and our communities.

## Updates

In 2017 and 2018, we have strengthened our core regions, through acquisitions that align with our sustainable growth-and-income model by targeting low risk assets with high netbacks, strong free cash flow generation, low base decline rates and strong capital efficiencies on future development. This adheres to our long-term strategy of balanced and diversified growth:<sup>102-10</sup>

- In May 2018, Vermilion completed a \$1.4 billion acquisition of Spartan Energy Corp., a publicly traded southeast Saskatchewan oil producer. The transaction significantly increases our presence in the desirable operating jurisdiction of southeast Saskatchewan, while increasing our exposure to high netback light oil in a highly advantaged product marketing setting.
- In January 2018, we acquired a private southeast Saskatchewan producer, with assets comprised of high netback, low base decline, light oil producing fields in the Sinclair and Fertile areas, straddling the Saskatchewan/Manitoba border.
- In December 2017, we were awarded a license for the Békéssámson concession in Hungary for a 4-year term, which more than doubles the size of our total land position in the country. Subsequent to year-end, we drilled and tested our first exploratory well in the South Battonya concession, marking the drilling of our first well in the Central and Eastern Europe Business Unit.
- In July 2017, Vermilion and the Canada Pension Plan Investment Board (CPPIB) announced a strategic partnership in Corrib, whereby CPPIB will acquire Shell Exploration Company B.V.'s 45% interest in Corrib for total cash consideration of €830 million, subject to customary closing adjustments and future contingent value payments based on performance and realized pricing. The acquisition has an effective date of January 1, 2017. At closing, Vermilion expects to assume operatorship of Corrib, and CPPIB plans to transfer the operating entity and a 1.5% working interest to Vermilion for €19.4 million, before closing adjustments. We continue to work closely with CPPIB and Shell on the transition of ownership and operations of the Corrib asset. Transition has progressed well with all technical aspects being ready, and final approvals from the necessary authorities expected to be received by the end of 2018.



# Sustainability Vision

Our approach to sustainability, and our business in general, remains one where we prioritize people and the environment over profitability: the safety and health of our employees, contractors and those directly or indirectly involved in our operations is placed above all else. G4-2

Vermilion's sustainability report is our way of communicating how we identify the economic, environmental and social impacts of our operations, and how we integrate their associated opportunities and risks into our business strategies. Over time, our reporting activities are helping us to realize our sustainability vision:

***As a responsible oil and gas producer, Vermilion Energy Inc. consistently delivers long-term shareholder value by operating in an economically, environmentally and socially sustainable manner that is recognized as a model in our industry.***

We understand our moral and legal duty to operate in a manner that protects the health and safety of our people and communities, provides responsible stewardship over the environment, and treats our people, partners and suppliers respectfully and fairly.

From the landowners with whom we share the landscape, to the families and businesses that rely on oil and gas to fuel their daily needs, our exploration and production activities have potential effects on a wide range of stakeholders who expect Vermilion to deliver consistently strong financial results in a responsible and ethical way.

**These expectations align economic success with every element of our sustainability commitments, and have led us to prioritize our objectives in the following order:**

- 1
- The safety and health of our staff and those involved directly or indirectly in our operations. Nothing is more important.

### Our Sustainability Vision

As a responsible oil and gas producer, Vermilion Energy Inc. consistently delivers long-term shareholder value by operating in an economically, environmentally and socially sustainable manner that is recognized as a model in our industry.

2

Our responsibility to protect the environment. We follow the Precautionary Principle <sup>G4-14</sup> introduced in 1992 by the United Nations "Rio Declaration on Environment and Development" <sup>G4-15</sup> by using environmental risk as part of our development decision criteria, and by continually seeking improved environmental performance in our operations.

3

Economic success through a focus on operational excellence across our business, which includes technical and process excellence, efficiency, expertise and stakeholder relations.

We believe these three priorities generally do not conflict with each other, because business that is conducted in the safest and cleanest manner is also most likely to be the most profitable way to do business over the long term. In instances where these three priorities may be in conflict, we instruct our staff that the health and safety of people and the protection of the environment must always take priority over profitability.

For more information on how we manage sustainability, please see our [Governance](#) page.

# Sustainability Policy

To meet our commitments, we rely on the framework and priorities provided by our sustainability policy:

Vermilion's sustainability policy is guided by our core values of Excellence, Trust, Respect and Responsibility. It applies to all of our operations, and in each of the communities where we live and work. Sustainability is led by our senior management team and supported by our Board of Directors, and championed by our employees and contractors. It applies equally to our suppliers and to those who represent us or conduct activities on our behalf.

Guided by our Code of Business Conduct and Ethics, Vermilion meets or exceeds the requirements of all applicable laws and standards in the communities where we operate, through all of our activities, including exploration, drilling, completion, operation and remediation. In doing so, we are committed to transparent and respectful engagement with our stakeholders, including our investors, employees, partners, suppliers and communities.

**Sustainability is integrated into all facets of our business, and is reflected in the following five key areas:**

## 1. Governance and Ethics



- Vermilion demonstrates strong corporate governance, with leadership that sets an example of the highest standards of ethics and integrity and a commitment to the responsible development of our diverse resource portfolio.
- Our leadership model effectively embeds ethical, fiscal, environmental and social considerations into all aspects of our business, resulting in operational excellence and the protection of our human, natural, financial, operational, intellectual and reputational capital.

## 2. Economic Performance



- Vermilion recognizes that strong, consistent fiscal performance provides positive economic benefits for all of our stakeholders.
- We focus on generating long-term, top quartile and stable shareholder returns. Our disciplined approach, together with our technical and intellectual excellence, ensures we recognize and develop appropriate

opportunities, effectively manage risks, and continuously improve operational efficiency.

### 3. People



- Vermilion's commitment to people is embedded in our core values: we embrace diversity, we value and care for our people, and believe every employee and business associate worldwide deserves to be treated with dignity and respect.
- We recognize the principles of The Universal Declaration of Human Rights, and have policies in place to support these principles throughout our operations, including creating a fair and equal-opportunity workplace.
- We challenge and inspire our employees to achieve their best, and value the teamwork, collaboration and innovation that lead to creating both a great place to work and outstanding company performance.

### 4. Health, Safety and Environment



- Vermilion is committed to conducting our activities in a manner that will protect the health and safety of our employees, contractors and the public while reducing our impact on the environment.
- We fully integrate HSE into our business – with the mantra of Everywhere, Everyday, Everyone. Our vision is that our HSE culture is recognized as a model by our industry and our stakeholders, resulting in a healthy workplace free of incidents.
- Every staff member, including management, is accountable for HSE and is actively involved in continuously delivering HSE performance improvements.

### 5. Communities



- Vermilion strives to support the communities in which we operate using a shared value model. We work to develop economic and employment opportunities, build positive relationships and contribute to meaningful, mutually beneficial partnerships that strengthen both the community and our company capacity.
- Our community investment program contributes to the quality of life in our communities through both charitable giving and employee engagement, supporting social, environmental and cultural issues. Through this program, our "Ways of Caring," we give back, we give time and we give together.



## Company Performance – Awards and Ratings



Vermilion was one of only 193 companies globally to achieve CDP Climate "A" List recognition in 2016 and the only North American energy company on the list. Across all sectors, only three Canadian companies, including Vermilion, were awarded a position on 2016's Climate "A" List. Vermilion was one of only five oil and gas companies in the world to be named to the Climate "A" List.

In both 2018 and 2017, Vermilion was recognized with a Leadership Level rating of A-. We were the top-rated Canadian oil and gas sector company, and placed within the top 2% of North American and top 5% of global oil and gas sector companies.



Vermilion ranked 11<sup>th</sup> in the 2018 **Corporate Knights Future 40**, which showcases the environmental, social, economic and governance performance of Canada's emerging corporate sustainability leaders. This is our fifth consecutive appearance on the list, and we are also the highest ranked oil and gas company in the ranking.



Vermilion's MSCI ESG rating was re-affirmed as an A for 2018, marking the second consecutive year Vermilion has scored an A, and our Governance Metrics score ranked in the top decile globally.



Our geothermal heat partnership with tomato growers in Parentis, France has been recognized by the Government of France's 2013 Circular Economy Award for Industrial and Regional Ecology.



In 2018, we were recognized by the **Great Place to Work Institute®** as a Best Workplace in Canada, The Netherlands and Germany (Berlin-Brandenburg Region). We were also certified by the Institute in France.



We have been recognized annually for excellence in governance practices as part of the Globe and Mail annual **Board Games** survey since 2006. In 2018, Vermilion governance practices resulted in a rank of 4th among oil and gas companies in Canada.



Year-over-year recognized by the **Canadian Coalition for Good Governance** for best practices for proxy disclosure in the area of corporate governance relating to directors' independence and benefits and perquisites. Golden Gavel Award recipient for Best Disclosure of Governance Practices and Approach to Executive Compensation by a small or mid-sized issuer.



Vermilion received ISS decile QualityScores of "1" for Environment and "2" for Social disclosures and transparency, ranking at the top of our peer group.

We were also recognized for excellence in managing governance risk with a decile score of "3" for Governance practices. ISS QualityScore is a scoring solution supported by data on board structure, compensation, shareholder rights and audit, designed to help institutional investors identify governance risk within portfolio companies.



WINNER OF THE 2015 EPAC AWARD FOR

*Top International Producer*

Recognized by EPAC as the 2014 Top Canadian-Based International Producer. Evaluated on seven financial and operating performance benchmarks (75% of score), including: Total return, Production growth per debt-adjusted share, Corporate cash margin, Proved-plus-probable reserves growth per debt-adjusted share, Proved-plus-probable FD&A costs per boe (including future development capital), Recycle ratio. Remaining 25% of score was based on industry leadership and corporate culture, including HSE, community investment, innovation, training, and other sustainability-related programs.

## External Associations and Initiatives

Vermilion's sustainability approach is also guided by our participation in the following external initiatives and associations:

Voluntary External Initiative <sup>102-12</sup>	INITIATIVE DETAILS
<b>Carbon Disclosure Project</b>	Vermilion has voluntarily filed Climate Change Responses with CDP since 2014; Vermilion was the first Canadian energy company to achieve the top score of 100, was named to the Climate A List in 2016 and received a score in the top 3% of companies in 2017. Stakeholders include a wide range of sustainability and environmental non-governmental associations, in addition to investors, governments, businesses and cities.
<b>Energy Sector Sustainability Leadership Initiative</b>	This voluntary working group focused on sustainability benchmarking within the oil and gas industry in Calgary when it launched in 2013, and has since transitioned into a focus on energy sector sustainability best practices. Vermilion chaired the initiative in 2017.
<b>RobecoSAM Corporate Sustainability Assessment</b>	Vermilion began voluntarily reporting into the CSA in 2017, achieving a top quartile ranking for the oil and gas sector in 2017 and 2018. RobecoSAM is an investment specialist focused exclusively on sustainability investing, and holds memberships in a range of responsible finance and investment organizations.
<b>Dutch Long Term Energy Efficiency Improvement Program (MJA Program)</b>	Vermilion provides detailed long-term planning and annual reporting/updates into this mandatory energy efficiency industry program on an ongoing basis.
<b>Pole AVENIA Geosciences Innovation Valley</b>	Vermilion began serving on the Board of Directors of this voluntary competitiveness cluster in 2013; AVENIA has many programs related to supporting geothermal development in France and optimizing recovery from existing hydrocarbon reservoirs. It brings together companies, research laboratories and schools, and also involves governments and local organizations.
<b>Ambès Regional Water Basin Committee</b>	Our Ambès superintendent has been elected as a voluntary member of this basin committee, having a key role in two commissions: the Littoral Commission and the Industry Commission. The committee brings together a wide range of regional stakeholders focused on the health of the water basin.

Association Membership <sup>102-13</sup>	Association DETAILS
<b>Australian Petroleum Production &amp; Exploration Association (APPEA)</b>	Vermilion is an active member of APPEA, which represents Australia's oil and gas exploration and production industry. Our Managing Director in Australia has been a long-time director on the APPEA board, and previously served as the board's Chair.
<b>Canadian Association of Petroleum Producers (CAPP)</b>	CAPP's mission, on behalf of the Canadian upstream oil and natural gas industry, is to advocate for and enable economic competitiveness and safe, environmentally and socially responsible performance. Vermilion renewed its membership in CAPP in 2018.

<b>UFIP (Union française des industries pétrolières)</b>	UFIP is the French industry association for the petroleum industry, including companies operating in France in one of the oil and gas industry's three major segments: exploration and production, refining, and marketing. It provides the French government with ongoing industry feedback on various European Union directives/initiatives.
<b>France-Canada Chamber of Commerce</b>	Vermilion began serving on the Board of Directors in 2012. The Chamber of Commerce promotes business activities between Canada and France.
<b>Dutch oil and gas explorer and producer association (NOGEPA)</b>	Vermilion is an active member of the Dutch oil and gas explorer and producer association. We participate in several workgroups and sub-committees, working closely with other industry representatives to continuously improve our practices related to safety, environment and public acceptance.
<b>Energy and Equipment Materials Users Association (EEMUA)</b>	Vermilion joined EEMUA, which is focused on supporting its member companies with safety, efficiency and compliance good practice, in 2018.



## About Our Report

Our 2018 Sustainability Report is Vermilion's fifth report on how we manage economic, environmental, social and governance (EESG) factors, including impacts, risks and opportunities.

We have previously produced an online report that was updated once annually, with printable long- and short-form PDFs in our key languages.

With our 2017 report, we changed our format to one that will be updated online regularly through the year. We expect to augment this with a short highlights summary in key languages when the annual Performance Metrics cycle is complete each year.<sup>102-49</sup>

This reporting approach establishes key areas of discussion for each of Vermilion's nine identified Material Topics under the GRI Universal and Topic-Specific Standards:

- Dashboard page with the most recent updates
- Approach section that details why the Aspect is material, how we manage it, and how we evaluate and adjust as needed (our Discussion of Management Approach), and
- Individual pages that create easily accessible information for long-term projects.

Our goal is to streamline our annual reporting, allowing us to focus on updates to activities while maintaining the robust discussions needed under various reporting frameworks.

We continue to use the GRI Standards to guide our sustainability reporting, as the Global Reporting Initiative remains the leading framework for EESG reporting. We have prepared this report in accordance with the GRI Standards: comprehensive option, and incorporates GRI's 10 key Reporting Principles for defining report content and quality.<sup>102-49</sup>

We note increasing external stakeholder pressure to expand issues of materiality beyond what we have identified. To aid sustainability and ESG analysts in this regard, we have expanded our GRI Content Index to include alignment with the SDGs, CDP, UN Global Compact, RobecoSAM, the EU Directive on Non-Financial Disclosures and the Task Force on Climate-Related Disclosure. We urge all ESG analyst and reporting organizations to focus their efforts on aligning reporting requirements beyond their own standards, in the spirit of SDG 17 to aid transparency while recognizing the increasing reporting burden on companies, particularly on small- and medium-sized enterprises.

This report covers Vermilion's operated business units, including Canada (CBU), France (FBU), Netherlands (NBU), Germany (GBU), Central and Eastern Europe Business Unit (CEE), Australia (ABU) and U.S. (USBU).

The report does not cover our non-operated interests in the Corrib gas field in Ireland, with the exception of reporting on organizational scale and staff count. In this case, the operating partner (Shell E&P Ireland) would include these projects under their sustainability reporting.<sup>102-45</sup>

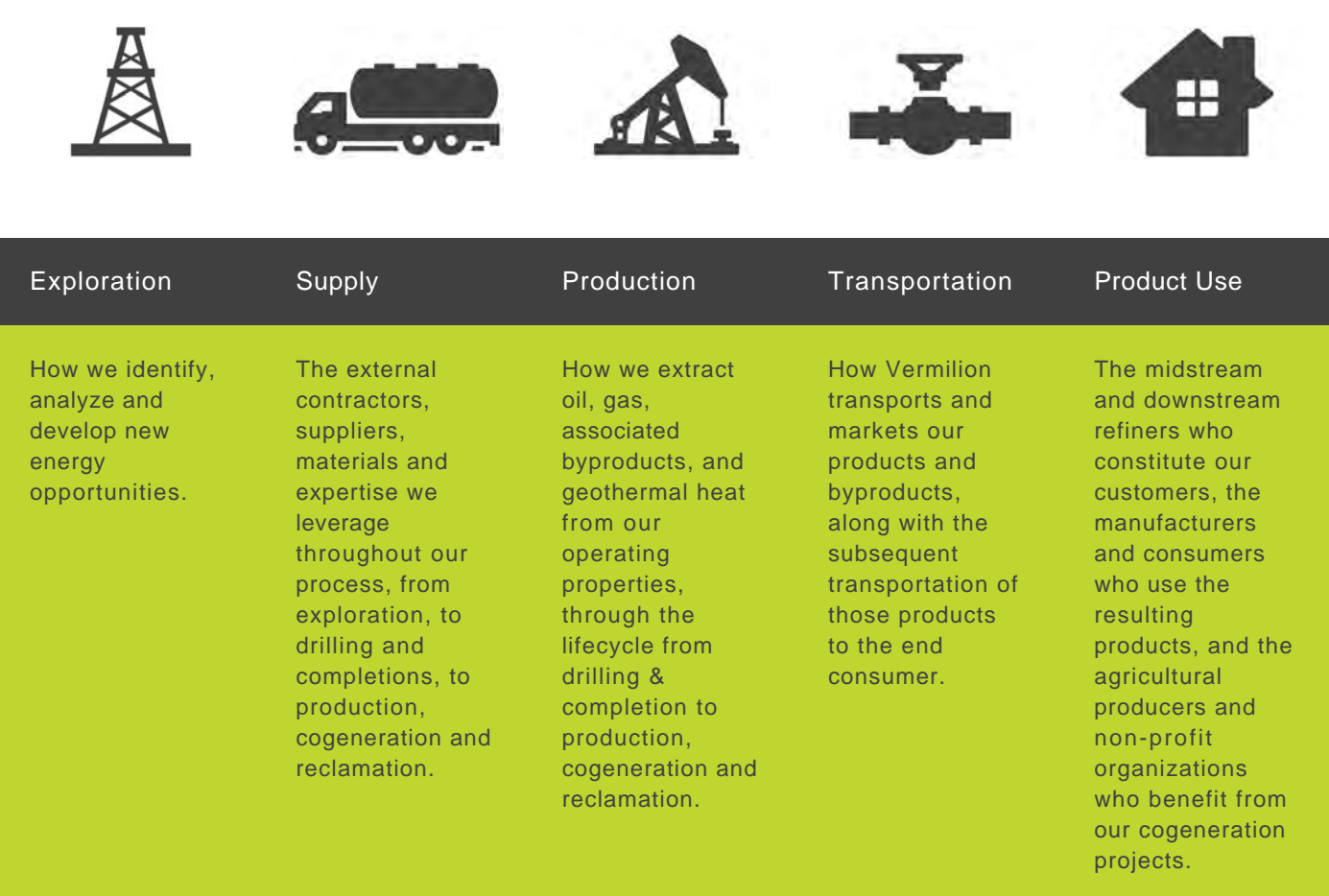
Where updates of previously reported information were required, they are noted in our Performance Metrics document.<sup>102-48</sup>

## Previous Reports

Report Title	Performance Metrics Included
2017 Sustainability Report	2012-2016
2016 Sustainability Report (report title renumbered to publication year rather than Performance Metrics year)	2012-2015
2014 Sustainability Report	2012-2014
2013 Sustainability Report	2012-2013

# Our Value Chain

Vermilion's operations influence an extensive value chain that connects energy resources with activities that are essential to our daily lives, including transportation, manufacturing and heating, thus contributing to the strength and resilience of the global economy. We believe that our contributions to the value chain create wealth for global citizens, providing the wherewithal for environmental protection and helping raise many of our fellow global citizens out of poverty. <sup>102-9</sup>



## Value, impact or influence



Exploration	Supply	Production	Transportation	Product Use
Our decisions about where to operate and how best to source energy offer job creation and economic assets for communities, while requiring strong safety and environmental protection and community capacity analysis	Our purchasing decisions, including our performance expectations of suppliers, have a strong influence on company and community safety, environmental impacts and economic success	We focus on the operational excellence of our people, processes and technology to maximize safety and environmental management and economic value; this includes the land reclamation stage of well life cycle management	This supports local energy security, job creation and economic success while potentially involving safety and environmental impacts, including pipeline, road and rail transport safety, waste transportation and disposal safety	The economic value, and the potential safety and environmental impacts, of our products are important to industrial, financial and consumer sectors, all of which rely on a stable and secure energy supply

## Focus of operational activity &amp; decision making



Exploration	Supply	Production	Transportation	Product Use
Internal to Vermilion, with external consultation	Both internal and external to Vermilion	Primarily internal to Vermilion, with external consultation	Primarily external to Vermilion	Primarily external to Vermilion

Key stakeholders, listed by degree of impact <sup>102-40</sup>

Exploration	Supply	Production	Transportation	Product Use
<ul style="list-style-type: none"> <li>&gt; Communities</li> <li>&gt; Government</li> <li>&gt; Investors</li> <li>&gt; Partners</li> <li>&gt; NGOs</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Suppliers</li> <li>&gt; Employees</li> <li>&gt; Investors</li> <li>&gt; Communities</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Communities</li> <li>&gt; Investors</li> <li>&gt; Employees</li> <li>&gt; Partners</li> <li>&gt; Government</li> <li>&gt; NGOs</li> <li>&gt; Media</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Communities</li> <li>&gt; Partners</li> <li>&gt; Customers/end users</li> <li>&gt; Investors</li> <li>&gt; Government</li> <li>&gt; NGOs</li> <li>&gt; NGOs</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Customers/end users</li> <li>&gt; Investors</li> <li>&gt; Government</li> <li>&gt; NGOs</li> <li>&gt; Media</li> </ul>

## Primary issues <sup>102-44</sup>

(top three to five identified through stakeholder engagement and issues monitoring)



Exploration	Supply	Production	Transportation	Product Use
<ul style="list-style-type: none"> <li>➤ Safety</li> <li>➤ Environment</li> <li>➤ Community relations</li> <li>➤ Regulation</li> <li>➤ Governance</li> </ul>	<ul style="list-style-type: none"> <li>➤ Safety</li> <li>➤ Environment</li> <li>➤ Efficiency</li> <li>➤ Supply chain management</li> </ul>	<ul style="list-style-type: none"> <li>➤ Safety</li> <li>➤ Environment, including GHG emissions</li> <li>➤ Community / government relations</li> <li>➤ Staff relations</li> <li>➤ Efficiency</li> </ul>	<ul style="list-style-type: none"> <li>➤ Transport safety</li> <li>➤ GHG emissions</li> <li>➤ Spills</li> <li>➤ Ethics</li> <li>➤ Stable supply</li> </ul>	<ul style="list-style-type: none"> <li>➤ Safety</li> <li>➤ Stable supply</li> <li>➤ GHG emissions</li> <li>➤ Cost</li> <li>➤ Regulation</li> </ul>

## Stakeholder Engagement

We continue to regard our people, communities, investors, governments and regulators, and partners and suppliers as Vermilion's key stakeholders: those who have the greatest impact on our business, or who are most impacted by our activities.

We base stakeholder identification and prioritization on our understanding and analysis of our value chain, with engagement that is guided by their impact and influence.<sup>102-42, 413-1</sup> In 2017, for example, as a result of our external stakeholder engagement, and the increasing importance of changes to regulatory frameworks and legislation in our operating areas, we added Government (including regulators) as a key stakeholder.



Our robust strategy for managing our economic, environmental and social performance reflects the respect we have for our key stakeholders. These groups influence our business and operations in several ways, including through the provision of capital to fund our activities, the provision of licenses for exploration and production, and the setting of expectations regarding safety and environmental performance. Meeting these expectations is the key to maintaining our social license to operate and increasing our productivity, and we therefore engage with these stakeholders on a regular and ongoing basis.<sup>102-43</sup>

Over the past several years, we have developed our external stakeholder engagement program to reflect the importance of community and government support. We manage this on a business unit-specific basis. This includes dedicated Public and Government Relations staff in France, The Netherlands and Germany, and a regulatory specialist in the United States. In Canada, our Land department plays a key role in community and Indigenous Peoples relations. In Australia, we have engaged external stakeholders as part of our Safety Case and Environment Plan, and through our leadership of the **Oiled Wildlife Response** project, which brought universities, industry partners, suppliers and government together to improve wildlife protection.

While external stakeholder engagement is guided by regulations in some of these cases, our approach is to proactively communicate in all cases with our community and government stakeholders – both individually and in venues such as town halls and open houses, where we provide information about our activities (planned and ongoing) and invite feedback. In the near term, for example, Vermilion will continue to evaluate and prioritize the exploration opportunities available on our land base. As we complete these assessments, we will present exploration activity plans to partners, authorities as well as public and community stakeholders. These plans will reflect our efforts to minimize the environmental and social impact of our activities. As environmental impact assessments are a critical element of the

acceptance and permitting process, Vermilion will ensure that they are conducted in the most rigorous manner feasible.

For stakeholders with lesser degrees of impact or influence, our engagement is more specific and generally involves direct issue-related communication.

The following table details how we engage with our stakeholders, topics raised, and how we have responded.  
102-40,102-42,102-43,102-44

## Current & potential investors



Engagement Channels	Topics Related	Response
<ul style="list-style-type: none"> <li>➤ Annual General Meeting and webcast, distribution of financial statements &amp; proxy statement</li> <li>➤ Annual benchmarking against peers through Globe and Mail Board Games</li> <li>➤ Business updates, analyst conference calls</li> <li>➤ Ongoing presentations to investor and industry conferences, with webcasts on external Vermilion website and intranet</li> <li>➤ Ongoing monitoring of and response to investor relations e-mail and phone inquiries</li> <li>➤ Ongoing monitoring of and response to social media including LinkedIn and Twitter</li> <li>➤ Media monitoring/ media appearances</li> <li>➤ News releases</li> <li>➤ Responses to sustainability-related queries from, and engagement with, socially responsible investment agencies and shareholders who are signatories to the UN's Principles for Responsible Investment</li> </ul>	<ul style="list-style-type: none"> <li>➤ Financial results</li> <li>➤ Increasing emphasis on transparency and sustainability reporting</li> <li>➤ Recommendations from the Task Force on Climate-Related Financial Disclosures</li> </ul>	<ul style="list-style-type: none"> <li>➤ Ongoing communication of material issues and results</li> <li>➤ Confidential industry benchmarking project for CDP reporting</li> <li>➤ CDP Climate Change Response</li> <li>➤ Sustainability report</li> <li>➤ Response to requests for interviews and other input</li> <li>➤ Reviews of evaluations by socially responsible rating agencies, including corrections and responses</li> <li>➤ Changes to sustainability reporting</li> <li>➤ Input into business strategy</li> </ul>

## Employees



Engagement Channels	Topics Related	Response
<ul style="list-style-type: none"> <li>➤ Annual Great Place to Work® program confidential staff survey, communication of results to staff through e-mails and meetings, ongoing engagement of staff in feedback and improvement action planning meetings from department to team levels</li> <li>➤ Global town halls, with executive question-and-answer sessions based on questions submitted anonymously in advance, or from the floor of the meeting</li> <li>➤ Additional confidential staff surveys on topics such as HSE (Perceptions survey) and community investment (choices of non-profit partners, activities, etc.)</li> <li>➤ Additional town halls in each of our business units with leadership question-and-answer sessions</li> <li>➤ New employee breakfasts and lunches, as needed</li> <li>➤ Vermilion 101 – Introduction to Oil &amp; Gas for new staff, as needed</li> <li>➤ Whistleblower policy, 24/7 (referred to internally as “Reporting of Inappropriate Activity”)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Strategic direction of the company</li> <li>➤ Employee engagement and satisfaction</li> <li>➤ Communication (internal and external) of community investment program</li> <li>➤ Clear communication and implementation of HSE program</li> </ul>	<ul style="list-style-type: none"> <li>➤ Executive response to town hall suggestions and questions</li> <li>➤ Implementation of suggestions from staff working groups</li> <li>➤ Implementation of Fair Culture Policy in all business units</li> </ul>



## Partners & Suppliers



Engagement Channels	Topics Related	Response
<ul style="list-style-type: none"> <li>&gt; HSE Pre-qualification screening and auditing of operations to ensure compliance</li> <li>&gt; Safety meetings, including both Vermilion staff and our contractors and partners</li> <li>&gt; Meetings, etc. to review requirements and negotiate contracts, as needed</li> <li>&gt; Daily operations, including inspections and field audits</li> <li>&gt; Meetings, phone calls, e-mails as issues or concerns arise</li> </ul>	<ul style="list-style-type: none"> <li>&gt; HSE performance</li> <li>&gt; Access to opportunities</li> <li>&gt; Production and financial results</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Development of HSE High Five personal safety initiative</li> <li>&gt; Focus on operational excellence</li> <li>&gt; RFPs and invitations to bid</li> </ul>

## Communities



Engagement Channels	Topics Related	Response
<ul style="list-style-type: none"> <li>&gt; Stakeholder engagement programs, including proactive communications (letters, town halls, open houses, surveys, etc. ) to provide information and gather feedback</li> <li>&gt; Meetings, phone calls, e-mails with landowners, as needed</li> <li>&gt; Contract negotiation with landowners, as needed</li> <li>&gt; Ongoing partnerships with key social agencies</li> <li>&gt; Meetings, e-mail, phone calls with other local social agencies &amp; councils, ongoing</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Community support and capacity building</li> <li>&gt; Public safety</li> <li>&gt; Environmental stewardship</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Progressing community investment program in all locations based on community and staff engagement (see <b>Our Communities</b> in this report) and guided by the concept of Creating Shared Value</li> <li>&gt; Discussions with local communities regarding impacts and potential partnerships</li> <li>&gt; Increased engagement with Indigenous Peoples communities, including business opportunities and community investment</li> <li>&gt; Implementation of online</li> </ul>

<ul style="list-style-type: none"> <li>Customized community investment program for each location, ongoing</li> <li>Communication of community investment via external website &amp; LinkedIn, ongoing</li> <li>Engagement with Indigenous Peoples communities, including provision for consultation, free, prior and informed consent, business opportunities and community investment OG-9, DMA Social</li> </ul>		community investment applications to streamline process for community groups
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## Governments



Engagement Channels	Topics Related	Response
<ul style="list-style-type: none"> <li>Regulatory requirements in all of our locations</li> <li>Meetings, phone calls, conferences with government officials, ongoing</li> </ul>	<ul style="list-style-type: none"> <li>Compliance</li> <li>Economic and community development</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with or exceeding all regulatory requirements</li> <li>Audits and inspections to confirm compliance</li> <li>Proactive community investment and sustainability programs</li> <li>Alignment of sustainability strategy with SDGs</li> </ul>

## NGOs: industry, environment, social



Engagement Channels	Topics Related	Response
<ul style="list-style-type: none"> <li>Ongoing participation in industry meetings and conferences</li> <li>High-level review of NGO positions and topics</li> </ul>	<ul style="list-style-type: none"> <li>Increasing transparency and communication of sustainability performance</li> <li>Environmental concerns and performance based on location. location (see our</li> </ul>	<ul style="list-style-type: none"> <li>Annual CDP submission and engagement</li> <li>Alignment of sustainability strategy with UN SDGs</li> <li>Active engagement with socially</li> </ul>

<p>➤ Meetings with NGO representatives</p>	<p>Environment section)</p>	<p>responsible rating agencies, including Sustainalytics, MSCI, Vigeo-Eiris, ISS and RobecoSAM</p> <p>➤ Focus on operational excellence, including compliance with or exceeding all regulations</p> <p>➤ Use of feedback in developing internal environmental and social programs</p>
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## Identifying Issues

To identify and review the topics relevant to our sustainability strategy and its integration within the business, we begin by reviewing the issues we originally identified when we began the reporting process in 2013, and those that we have added since based on stakeholder engagement and recommendations, including: <sup>102-15,102-46</sup>

- International standards, including the United Nations Global Compact, OECD Guidelines for Multinational Enterprises, The Universal Declaration of Human Rights, the Global Goals for Sustainable Development (SDGs) and the United Nations Declaration on the Rights of Indigenous Peoples
- Recommendations from sector-related government, regulatory and industry bodies, including the Canadian Association of Petroleum Producers, Extractive Industries Transparency Initiative, climate-related programs from regional and federal governments where we operate, and European Union Directive 2014/95/EU
- Published research and analysis from reporting entities such as GRI, CDP, the International Integrated Reporting Council, Sustainability Accounting Standards Board and The Task Force on Climate-Related Financial Disclosures
- Reports and benchmarking from third parties with insight into the area and socially responsible investment analysts, including Deloitte, Ernst & Young, KPMG, ISS, Sustainalytics, AccountAbility, MSCI, Vigeo-Eiris, Bloomberg, SHARE, RobecoSAM (Dow Jones Sustainability Index), FTSE4GOOD and Corporate Knights Capital
- Sustainability/corporate responsibility reports from sector-leading companies
- Media scans

We then analyze issues that Vermilion identifies as important to the company, using such sources as annual reports, risk matrices, employee surveys and internal policies and procedures. By further examining our value chain, including our stakeholder engagement results such as community feedback, we add issues that are important to the people and locations upon which our operations have an impact.

Once we have reviewed these issues, we provide key internal stakeholders, including the senior management team, with opportunities to provide their feedback on these original topics as well as any new topics for consideration in this report. <sup>102-46 102-47 103-1,</sup>

We also reflect on the disclosure requirements and EESG topics contained within other sustainability reporting frameworks, as well as the sustainability reports and disclosure activities by our peers. Finally, we review and reflect on the feedback that we have received from SRI and other sustainability-related organizations, and incorporate this feedback where it strengthens our disclosure on the sustainability topics that matter most to Vermilion and our key stakeholders.

# Material Issues

The issues identified for this report have been cross-referenced to the GRI Standards, along with topic boundaries. A Boundary Assessment for each issue determined that the outcomes of the original assessment have not changed as to its relevance to Vermilion or the stakeholders throughout our value chain. <sup>102-49</sup>

For each issue, we have reevaluated whether they were of high, medium or low impact on Vermilion, and high, medium or low impact from the perspective of our key stakeholder groups. As a result, we have adjusted our materiality matrix, reflecting an increased importance of regulatory frameworks and community support, for example, and an increasing focus on water management, biodiversity and supply chain risk.

We use the following parameters to assess the level of impact on Vermilion:

High	Medium	Low
<div><div>➤</div><div>Critical or immediate (12-month) risk to health &amp; safety, environmental management, financial performance, reputation, employee relations, community relations, or social license to operate</div></div> <div><div>➤</div><div>Strong opportunity to significantly increase financial performance or operational efficiency</div></div> <div><div>➤</div><div>Likely reflected in externally and internally stated policies and/or commitments</div></div>	<div><div>➤</div><div>Important but not critical risk; risk may be mid-term (1-3 years)</div></div> <div><div>➤</div><div>Good opportunity to increase financial performance or operational efficiency</div></div> <div><div>➤</div><div>Likely reflected in internally stated policies and/or commitments; may be included in external policies and/or commitments</div></div>	<div><div>➤</div><div>Small or no risk; risk may be longer term (3-10 years)</div></div> <div><div>➤</div><div>Does not apply in our geographic operating areas or to our business</div></div> <div><div>➤</div><div>Small or no opportunity to increase financial performance or operational efficiency</div></div> <div><div>➤</div><div>May or may not be reflected in policies and/or commitments</div></div>

We use a similar approach to assessing potential impact of these issues on stakeholders. We analyze our engagement results with different groups of stakeholders, to identify issues and rate their importance reflecting the critical/high, important/medium, and small/low definitions from the table above. We also take into consideration how directly affected the stakeholders were (for example, employees and fenceline communities are more directly affected by Vermilion's operations than NGOs). We then integrate those results to identify where issues had a common impact or concern spanning several key stakeholder groups.<sup>102-46 102-47</sup>

The resulting summary of all GRI Aspects is contained in our full [GRI Materiality Analysis](#), which you can find in our additional information.<sup>102-47 103-1</sup>



## Validation & Review

Our materiality analysis was reviewed by a GRI-trained professional internal to Vermilion, who also holds a CSR-P designation (Corporate Social Responsibility-Practitioner, certified by The Center for Sustainability and Excellence). The analysis has also been reviewed and validated by Vermilion's senior management team.

We use engagement with sustainability and socially responsible investment analysts on an ongoing basis to support our alignment with GRI Guidelines and best practices, and our focus on continuous improvement. This includes such critical issues as governance, climate change, science-based target setting, and environmental metrics reporting.

Portions of the data contained in this report were independently audited or verified by the following organizations: LBG Canada (2012-2016), GLJ Petroleum Consultants and Deloitte (as noted in our GRI Content Index document). In addition, the environmental metrics included from our CDP submission are verified under ISO 14064-3. <sup>102-56</sup>

## Abbreviations & Terms

In this report, we refer to Vermilion Energy Inc. as "Vermilion", the "company", "we" or "our".

Term/Abbreviation	Definition
ABU	Australia Business Unit
bbl(s)	barrel(s)
bbls/d	barrels per day
boe	barrel of oil equivalent, including: crude oil, natural gas liquids and natural gas (converted on the basis of one boe for six mcf of natural gas)
boe/d	barrel of oil equivalent per day
CBU	Canada Business Unit
CEE BU	Central and Eastern Europe Business Unit
CDP	Carbon Disclosure Project
CO <sub>2</sub> e	carbon dioxide equivalents
EESG	Economic, Environmental, Social and Governance Impacts
FBU	France Business Unit
GBU	German Business Unit
GHG	Greenhouse gas
GJ	Gigajoules
GRI	Global Reporting Initiative
HSE	Health, Safety, Environment
\$M	thousand dollars
\$MM	million dollars
mbbls	thousand barrels
mboe	thousand barrel of oil equivalent
mmboe	million barrel of oil equivalent



MWh	megawatt hour
NBU	Netherlands Business Unit
NGLs	natural gas liquids
PPE	Personal Protective Equipment
USBU	United States Business Unit

# Governance Dashboard

Excellence. Trust. Respect. Responsibility. These four core values guide what we do and how we do it.

## SDG 13.1. Take urgent action to combat climate change and its impacts

This applies directly to Vermilion’s investments in environmental protection, disclosures of GHG emission and intensity data, internal carbon pricing and carbon liability analysis, and overall governance of climate risks and opportunities.



## SDG 16 covers a range of issues that are integral to effective business governance at Vermilion

- 16.1: Reduce all forms of violence – Internal policies on workplace violence, discrimination and/or harassment; whistleblower policies; respect for human rights
- 16.3: Promote the rule of law – Ethics policies
- 16.4: Combat organized crime – Audited annual reporting
- 16.5: Reduce corruption and bribery – Anti-corruption policies
- 16.6: Effective, accountable and transparent institutions – Internal governance structures
- 16.7: Responsive, inclusive, participatory and representative decision-making: Compensation and Board of Directors effectiveness disclosures



## Commitments and Progress

2017 Target	2018 Target	2019 Target
Conduct annual "say on pay" advisory votes at AGM 102-37  Received 97% shareholder approval	Conduct annual "say on pay" advisory votes at AGM  Received 86% shareholder approval	Conduct annual "say on pay" advisory votes at AGM

Develop procedures for contractors to confirm annually awareness of and compliance with our Code of Business Conduct  100% achieved	Establish Board of Directors Sustainability Committee  100% achieved	Develop Sustainability Committee Terms of Reference and associated procedures
	Adopt a formal Gender Diversity Policy in respect of the nomination of women to our Board  100% achieved	Incorporate sustainability-related information in regulatory filings in alignment with recommendations from the Task Force on Climate-related Financial Disclosures

## Key Updates

**Board Composition:** Vermilion's Board of Directors is currently comprised of 10 directors and 1 corporate secretary. Eight Directors (80%) are considered independent, and two (20%) are female. Mr. Anthony Marino and Mr. Lorenzo Donadeo are non-independent directors<sup>102-22</sup>

**Board Tenure:** In the last four years, we have appointed six new directors who bring valuable skills and experience to our company.

**CEO Pay Ratio:** Although not required by regulations such as the Dodd-Frank Wall Street Reform and Consumer Protection Act, we disclose the annual total compensation of our CEO to the median annual total compensation for employees.<sup>102-38 102-39</sup> Vermilion's 2017 CEO-to-worker ratio of 26-to-1 is magnitudes lower than the 361-to-1 ratio for S&P 500 Index companies reported by the [American Federation of Labor-Congress of Industrial Organizations](#).

**Diversity:** In 2018, we adopted a formal recruitment process for the Board and Executive Officer vacant positions that includes a candidate screening step that addresses gender diversity. The candidate screening process should include reasonable efforts to secure at least 50% of qualified women applicants and the interview pool for every Board and Executive Officer position available. <sup>102-24</sup>

**Company and Board Performance – Awards:** Vermilion is recognized for excellence in governance practices by a wide range of governance-related organizations, including the Globe and Mail Board Games report, the Canadian Coalition for Good Governance, MSCI and ISS. For details, please see our [Awards](#) page.

# Our Approach to Governance

## Our Approach to Governance, and Why It Matters

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Vermilion is committed to a high standard of corporate governance practice. Strong governance is in the best interest of our shareholders and promotes effective decision-making at the Board level and throughout the company. The members of our Board of Directors, Vermilion's highest governing body, are proven leaders who guide our management, ensure the continued integrity of our people and processes, oversee risk management, and position our company to deliver on our mission to consistently deliver superior rewards to investors, employees, partners and the communities in which we operate.

## Management

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Complete details related to Board governance can be found in our regulatory filings, particularly our annual Proxy Statement and [Information Circular](#).

### Key highlights include the following:

**Independence of Directors:** We define independence as the absence of relationships that could compromise the ability of a director to exercise judgment with a view to making an objective assessment of management and assessing the merits of management initiatives. We appoint an independent Chair of the Board, or if the Chair is not independent, an independent Lead Director. Our independence statement is publicly available via our [Board Operating Guidelines](#), which are published on our corporate website. <sup>102-23</sup>

**Board Structure:** Our board structure is a one-tier system. Our directors oversee all matters related to performance, including our economic, environmental, social and governance impacts, through five committees (below), and a New Venture Working Team: <sup>102-18</sup>

- Audit
- Governance and Human Resources
- Health, Safety and Environment
- Independent Reserves
- Sustainability

**International directorships:** Vermilion practices good governance standards with its international subsidiary companies, and has appointed independent directors to the Boards of our various subsidiaries. <sup>G4-41</sup> International Board members are responsible for overall guidance of the subsidiaries and are knowledgeable in the country of operations, with backgrounds in a combination of legal, regulatory, executive leadership and

operations. In aggregate, we have 11 independent international Directors. Boards of our international subsidiaries are two-tier systems and include representation by non-executive directors and employees.

**Compensation Transparency:** We communicate the individual compensation of our Board of Directors and our five highest paid executive officers via our annual Proxy Statement and Information Circular. We also publicly disclose the measures relevant for performance-based variable compensation. As a publicly traded company, we believe our stakeholders have a right to know this information, and that this level of disclosure strengthens trust in Vermilion.

**Board Skills:** We maintain a skills matrix to evaluate the skill set of the Board. Each Director rates their expertise in each area annually, on a scale from limited to expert. The results are then evaluated for individuals and for the Board as a whole. Following our most recent assessment, it was determined that the majority of directors are skilled, or at expert/mastery levels.<sup>102-28</sup>

The directors' skills matrix is reviewed regularly by the Board to ensure an appropriate mix of backgrounds, skills and experience to guide Vermilion's long-term strategy and ongoing business operations, and currently includes:

- CEO / Senior Officer experience
- Managing / Leading Growth
- Oil and Gas Operations
- Reserve Evaluation
- Global / International Operations
- Health, Safety and Environment
- Governance / Board
- Financial Literacy
- Financial Experience
- Risk Management
- Human Resources and Compensation
- Social Responsibility and Stakeholder Relations
- Government Relations / Regulatory

**Board Diversity:** We recognize the importance of diversity as a component of board effectiveness and business performance, and have adopted a **Board Diversity Policy** that embraces a broad range of factors, including age, race, gender, personal attributes, skill, training, educational background and life experience. We believe that by composing our Board of individuals that bring diverse backgrounds and skills, Vermilion has been and will continue to be successful in problem-solving, deliberating key issues and making quality decisions that deliver positive long-term results for our shareholders and stakeholders alike. Diversity and complementarity of skills are key criteria in Vermilion's board nomination process. In 2018, we adopted a formal recruitment process for the Board and Executive Officer vacant positions that includes a candidate screening step that addresses gender diversity. The candidate screening process should include reasonable efforts to secure at least 50% of qualified women applicants and the interview pool for every Board and Executive Officer position available. <sup>102-24</sup>

**Board Election and Tenure:** Board members are elected and re-elected on an annual basis individually, as opposed to elected by slate. We have a retirement guideline at age 70 (which we can make exceptions for), but

we do not have a term limit for directors. While term limits can help ensure the Board gains new perspectives, imposing this restriction means it would lose the contributions of longer serving directors who have developed a deeper knowledge and understanding of Vermilion and our industry over time. We also value new perspectives. See also Board Tenure on our Dashboard page.

## Performance, Evaluation and Adjustment

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**Board Evaluation:** The Governance and Human Resources Committee, whose members are all independent, ensures that each member of the Board, the Committees, the Chair and Lead Director are assessed annually in light of their relevant terms of reference and level of expertise within our skills matrix. Directors complete a number of confidential evaluations administered by our Corporate Secretary (who is a senior partner of our external legal counsel, and not an employee of Vermilion), including:

- Rating their own effectiveness and the effectiveness of each Committee, and
- Evaluating the contributions of their peers, including the Chair of the Board and the Lead Director, in order to provide performance feedback and suggestions for improved effectiveness or contributions. 102-28

The Governance and Human Resources Committee analyzes the results and assesses whether changes need to be made in the Board's processes, composition or Committee structure. Our goal is to continuously develop a top performing Board with diverse skills and deep expertise who add value to the business through governance oversight.

**Company and Board Performance – Awards:** We monitor corporate governance best practice development on an ongoing basis, engage with key governance and proxy advisory services, and adjust our practices where we determine it to be beneficial for the company and our shareholders. We are proud to be consistently recognized for excellence in governance practices by a wide range of governance-related organizations, including the Globe and Mail Board Games report, the Canadian Coalition for Good Governance, MSCI and ISS. For details, please see our [Awards](#) page.

# Ethics & Anti-Corruption

Excellence. Trust. Respect. Responsibility. Our core values guide what we do and how we do it.

## Our Approach to Ethics, and Why It Matters

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Every member of Vermilion, from the Board to our staff, understands they have a fiduciary and ethical duty to the company and its stakeholders, including the obligation to act honestly and in good faith. Our Code of Business Conduct and Ethics (“Code of Conduct”) outlines a framework of guiding principles for directors, officers, employees and contractors globally, and supports the personification of our core values and the demonstration of ethical business practices.<sup>102-16</sup>

## How We Manage Ethics

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**Specifically, the Code of Conduct covers:**<sup>102-25</sup>

- Conflicts of interest
- Compliance with the law
- Outside business interests
- Confidential information and securities trading
- Retention and destruction of records
- Accounting and auditing
- Recoupment of incentive compensation
- Entertainment, gifts and favours
- Improper payments, including bribes and facilitating payments
- Fair dealing - Non-profit and professional association
- Protection and use of the corporation’s property
- Political participation
- No loans to executive officers or directors
- Disclosure
- Workplace conduct and safety
- Environment

- Reporting of inappropriate activity
- No retaliation
- Responsibility

The Code of Conduct is contained within each country-specific Employee Handbook, which are available in English and in our other major languages, including French, Dutch and German. These handbooks are available 24/7 on our company intranet, and also contain Vermilion's country-specific policies, workplace guidelines, and employment obligations.

**Our employment obligations cover the following topics:**

- Code of Business Conduct & Ethics
- Social media
- Reporting of inappropriate activity
- Personal information privacy
- Anti-corruption policy
- Health & Safety - Environment
- Discrimination, harassment and workplace violence
- Drug and Alcohol
- Fitness for Duty

Training on Codes of Conduct is provided as part of the onboarding process for new employees and contractors. We also require all of our directors, officers, employees and contractors to review their employment obligations annually, and to electronically confirm their understanding and compliance with these obligations using our People information management system. <sup>102-17</sup>

Within the company, our President and CEO, and our Executive Vice President People and Culture, hold responsibility for these policies, while our entire executive team operates with an open-door policy for staff concerns about any of these issues. This is augmented by a confidential email option on [our website](#) and a phone number that allow staff and members of the public to anonymously report concerns or seek advice from our Corporate Secretary, who is a senior partner of our external legal counsel and not a Vermilion employee, can then take those concerns directly to the Board of Directors.

Our whistleblower policy – known internally as our “Reporting of Inappropriate Activity Policy” – prohibits retaliation, harassment or discrimination against anyone making a complaint or reporting a concern. Further ethics reporting can be found in our [Performance Metrics](#). <sup>102-17</sup>

**Third Party Vendors:** As part of our management guidelines, authorized Vermilion personnel must ensure that third-party vendors – suppliers and service providers – who enter an agreement with Vermilion for the handover of work and properties must communicate all appropriate Vermilion policies, standards, procedures and practices, and must monitor for their compliance. This is in place in all of our business units, and an audit protocol has been established to ensure this communication occurs. Examples of these policies include our Code of Business Conduct, and our obligations to provide a workplace free of harassment and violence.

**Anti-Corruption Policy:** Vermilion's Code of Business Conduct includes a Vermilion Anti-Corruption Policy.



Vermilion's operating context significantly mitigates corruption risks for our company: regions noted for their stable, well-developed fiscal and regulatory policies related to oil and gas exploration and development. However, we recognize the importance of guarding against corruption in all forms, and have included it not only in our Code of Business Conduct, but also in our wider business context. The policy clearly defines possible issues, warning signs and red flags, and the due diligence and record keeping that is required. Our Chief Financial Officer is also our Chief Compliance Officer and administers our anti-corruption policy.

**New Business Development, including Joint Ventures:** Analysis of corruption risks is specifically included in all new business development. When we consider entering a new country of operations or entering into any joint venture or partnership, we conduct an initial assessment based on Transparency International. If we decide to proceed with that business development or partnership, we conduct additional research and due diligence based on the results of the initial assessment, including the degree of risk presented by the partner, location, and the nature and sensitivity of the joint venture. When we hire consultants and services in other countries as part of business development or new ventures, we provide our Anti-Corruption policy and require they sign a compliance certificate to abide by our policy and the country's anti-bribery laws. Joint venture partners are also required to acknowledge both local and Canadian laws, and warranty that they will not violate anti-corruption laws, or authorize or provide any kind of payment that would be in contravention of those laws or our anti-corruption policy.

## Measurement

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To ensure that 100% of our staff and contractors have confirmed that they understand the policy and are not aware of any contraventions, either by themselves or others, we track the response rate from the annual employee and contractor sign-off for compliance with our Code of Conduct. Sign-offs that are not completed are followed up, to ensure that the policies are understood and complied with.

To further demonstrate ethical and anti-corruption transparency, we track and publicly disclose:

- Payments made to all governments in countries where we operate, through our **Extractive Sector Transparency Measures Act (ESTMA) report**, which can be found on our website; Canada is a supporting country to the **Extractive Industries Transparency Initiative**, which has confirmed that **ESTMA provides an equivalent level of reporting to the EITI Standard**.
- Memberships in industry-related trade associations, including those with advocacy mandates (see **External Associations and Initiatives**).
- Key community investment partnerships (see **Our Communities** section): our anti-corruption policy directly prohibits community support payments to political organizations, politicians and individuals. All payments must be made to a registered non-profit or charitable organization, are reviewed by our corporate community investment staff and authorized by leaders in accordance with our financial authority grid. They are entered into our accounting system, and thereby included in our annual financial audits.
- Political contributions: we do not contribute payments to political campaigns, political organizations, lobbyists or lobbying organizations.

## Evaluation and Adjustment

Specific staff who may encounter anti-corruption issues in their work have undergone additional training. This includes our senior executive and management team, sustainability team, and business development / new ventures team. The requirement for additional training is assessed annually.

# Sustainability Governance

## Our Approach to Sustainability Governance

At Vermilion, sustainability is integrated as part of our Strategic Plan into all of our activities, and is one of six key Strategic Objectives that drive our business performance. This demonstrates its position as a core element of our long-term vision, the strategy we use to achieve that vision, and how we evaluate our performance.

## Why Sustainability Matters

As a responsible energy producer, Vermilion believes that we can best deliver long-term shareholder value by operating in an economically, environmentally and socially sustainable manner that recognizes the importance of all of our stakeholders. The integration of sustainability principles into our business is not only the right thing to do: we believe it increases shareholder returns, enhances our business development opportunities and reduces long-term risks to our business model.

## How We Manage Sustainability

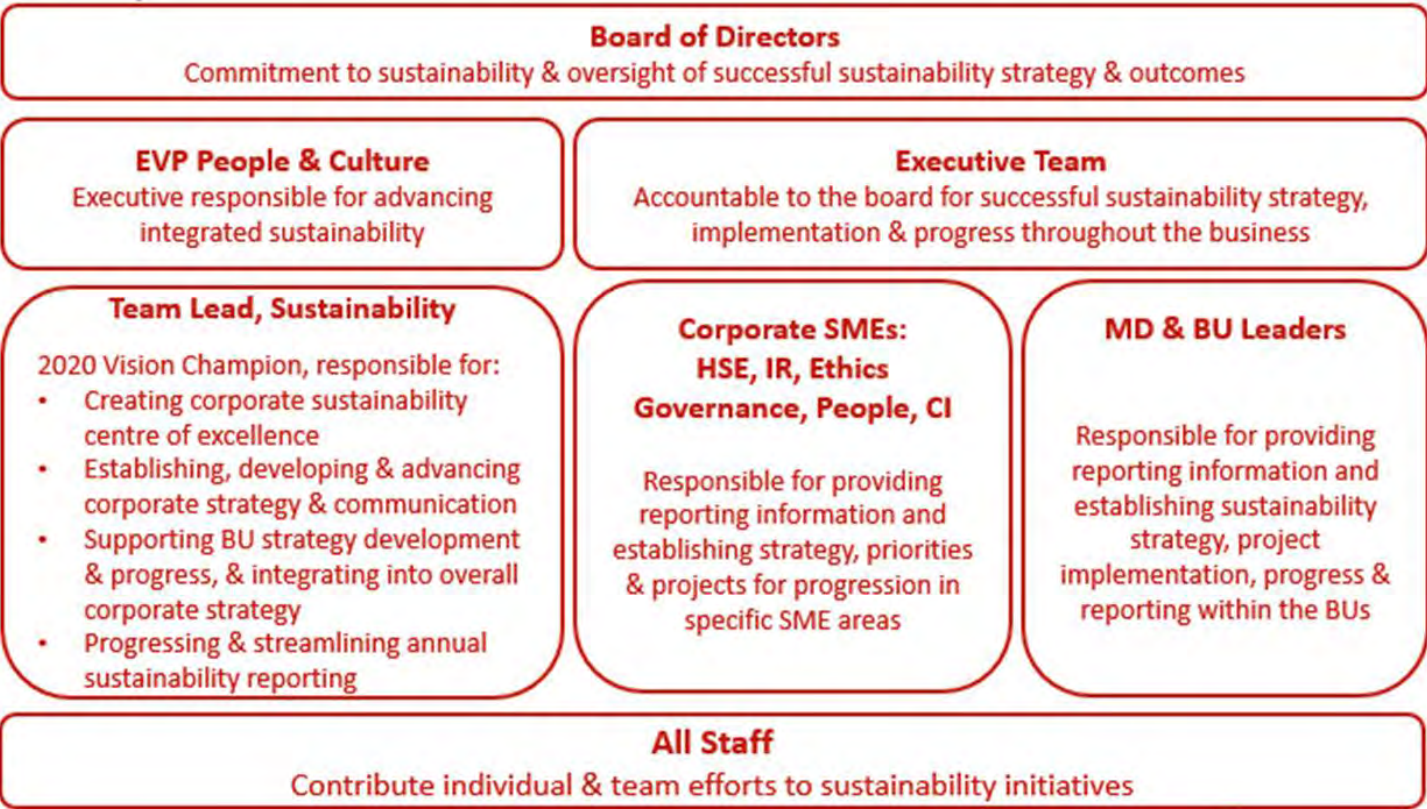
**Responsibility:** Vermilion defined our strategic objective as *Integrated* Sustainability because we believe sustainability impacts every business unit, department and employee in the company – and, in turn, they impact our sustainability. In keeping with this approach, the entire Board has responsibility for Vermilion’s sustainability program, with individual committees offering expertise and oversight on specific Economic, Environmental, Social and Governance (EESG) factors. In 2018, we also established a Sustainability Committee. 102-18 102-26 102-28

Committee	EESG Factor Overview
Audit	Financial information Risk management Internal control systems Audit processes
Governance and Human Resources	Board effectiveness and compensation risk Compensation philosophy and practices Corporate governance and performance People practices, including succession and development
Health, Safety and Environment (HSE)	Occupational, process and asset safety Environmental stewardship Risk management HSE-related sustainability initiatives

Independent Reserves	Reserves and resources Production Finding, developing and acquisition costs
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To ensure full coverage of EESG factors, our Board skills matrix includes sustainability-related skills such as Governance, HSE, Social Responsibility and Stakeholder Relations. All of these skills are supported by Board training as required. With specific regard to Sustainability, we also benefit from the expertise of one of our Board members, Mr. Timothy Marchant, who is an Adjunct Professor of Strategy and Energy Geopolitics at the Haskayne School of Business at the University of Calgary, and teaches graduate-level courses on corporate social responsibility and related areas.<sup>102-27</sup>

Organizational responsibility flows from the Board to our President and CEO, and throughout the company via our Executive team, on which our Executive Vice President, People and Culture is the executive member responsible for sustainability.



Various departments within the company report priorities and progress quarterly to either the full Board or Board committees on sustainability factors, including governance updates, HSE targets and performance, and developments within our community investment program. In addition, our sustainability team provides a Centre of Excellence approach, advising the business on all aspects of sustainability and reporting quarterly directly to the full Board regarding progress.<sup>10 102-20 102-26 102-30</sup>

We believe this approach clearly communicates, both externally and internally, our commitment to sustainability as a priority throughout the company and positions us to recognize the opportunities it presents. It also supports the proactive manner in which we address external risks that have potential impacts on short and longer-term company performance, including:

- An adverse HSE event
- The volatility of oil and gas prices
- Potential changes to government regulations and fiscal policies in our operating areas
- Community and other stakeholder concerns and issues, and
- The long-term financial implications of climate change.

Vermilion's Board of Directors, Executive team and Risk Management Committee regularly review these risks, along with mitigation strategies and associated opportunities (for more detail, view our [Risk Management](#) page).

## Measurement

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**Internal:** Vermilion's long-term vision is founded on six strategic objectives that cover the key elements of success, including: Extraordinary People; Best in Class Health, Safety and Environment; Top Quartile Shareholder Returns; Operational Excellence; Robust Portfolio, and Integrated Sustainability. Each of these has its own goals, supported by an Executive champion along with annual commitments that are reviewed regularly at the Executive and Board levels to assess and confirm progress.

Because sustainability objectives are included in long-term vision, progress on these drives both company and individual staff performance. We connect our performance to compensation through a pay-for-performance philosophy, combining reasonable base compensation with short-term and long-term incentive opportunities that are directly tied to operating and financial results, including fulfilment of sustainability commitments. Thus, sustainability performance is linked to executive and employee compensation. We report on this externally through our Proxy Statement and Information Circular each year.

**External:** Our Board of Directors and our Executive team continue to recognize our stakeholders' expectations and feedback as critical to Vermilion's success and integrate them into our ongoing processes for governance, strategy and performance. They are incorporated as goals into our strategic long-term vision, identified as commitments for annual planning, and assessed on a quarterly basis for progress against those commitments.

In addition to our stakeholder outreach, our stakeholders can communicate to the Board and to Vermilion in confidence directly and anonymously via our website, and via postal mail and email, dedicated Investor Relations phone and e-mail lines, investor relations presentations and events, and our annual meetings.<sup>102-21 102-29 102-30</sup>

## Evaluation and Adjustment

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When we began our sustainability reporting in 2014, we identified that our focus was primarily internal, and that we would develop our external stakeholder engagement over time. In subsequent years, this external engagement has taken shape, as we have sought input from socially-responsible investment agencies, welcomed engagement from shareholder signatories to the United Nations' Principles for Responsible Investment, and launched a wide range of engagement via our Public and Government Relations and Community Relations work in business units that include Canada, France, The Netherlands, Germany and Australia.<sup>102-28</sup>

Combined with our existing and ongoing sustainability work, this has led to three key areas of focus:

- Climate Policy approach, which is included in this report, and

➤ Science-based Target Setting analysis, which we continue to assess.

This is critical foundational work, and we are investing both the time and the resources required to get it right.

# Risk Management

One of the key roles of the board and company senior leadership is to provide risk oversight for Vermilion, including sustainability-related risks.<sup>102-30</sup>

## Our Approach to Risk Management, and Why It Matters

As a responsible company, effective risk and crisis management is vital for Vermilion. 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.

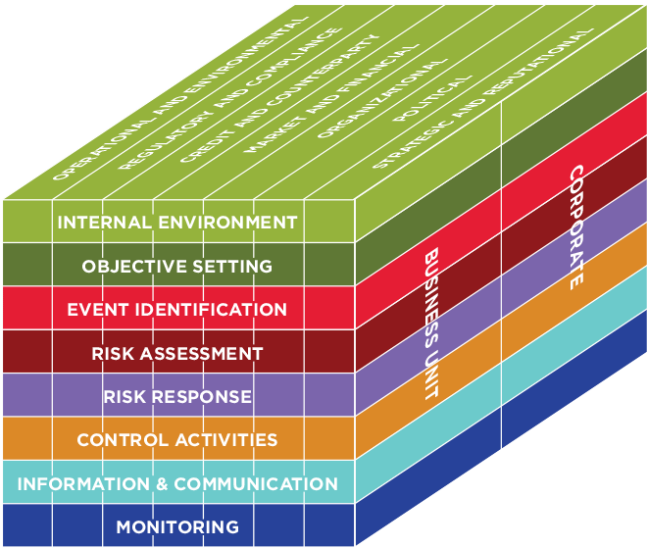
## How We Manage Risk

Our Enterprise Risk Management program enables us to identify and continually monitor risks – including economic, environmental and social risks – defined in the following categories:

- Operational and environmental, including climate-related risks
- Regulatory and compliance
- Credit and counterparty

### Vermilion’s Enterprise Risk Management Process

Risk associated with climate change has been quantified for each business unit utilizing the Enterprise Risk Management process. This process is utilized to assess implications and identify mitigating measures that are required to limit or reduce risk and potential liabilities to an acceptable and manageable level. Risk is assessed based on the anticipated impact severity and probability of an event occurring in consideration of human, environment, financial and social license to operate. Stakeholders in risk assessment include internal (Board of Directors, Executive, Staff) and external parties (Landowners, NGOs, investors, the general public, industry groups). Vermilion proactively conducts operational and engineering reviews aimed at increasing efficiency, including reducing emissions and monetary expenditure requirements at major facilities.



\* Vermilion’s ERM process based on Coso ERM Framework

- Market and financial
- Organizational
- Political
- Strategic and reputational

Risk is assessed based on the anticipated impact severity and the probability of an event occurring, in consideration of human, environment, financial and social license to operate factors. We use our corporate risk register to assess implications and identify mitigating measures to limit or reduce risk and potential liabilities to an acceptable level. This provides uniformity across the company while allowing for customization in each of our Business Units.

**Risk Identification:** Staff in operations and departments throughout the company feed into this risk framework in their own areas of expertise. This includes our Health, Safety and Environment team, Sustainability team, technical teams and Marketing (Economics) team. <sup>102-31</sup> Our staff also play a key role in identifying potential risk areas through their participation in the anonymous surveys prior to and after our quarterly global town halls. Their feedback and questions are shared with the Executive team, which in turn uses the information to guide strategy discussions, and reports back to staff with responses to concerns, ideas and suggestions raised. The feedback is also communicated to the Board when considered material.

In addition, external stakeholder engagement is used to identify risks that are important to those external to the company, including communities, landowners, investors, government and regulators, NGOs, the public and industry groups.

**Risk Management:** To manage identified risks, our internal control processes are proactive, and designed to help us achieve our business strategy of delivering modest annual growth in production and cash flow while also providing reliable and growing dividends to our shareholders. Our management approach reflects this, with a 10-year long-range plan that covers business strategy and related goals and objectives.

Risk awareness and management are the responsibility of the Board and the Executive team. Vermilion's Board independently reviews the effectiveness of our identification and management of risk quarterly, through its four committees. This gets translated into action by our Executive team, through implementation of associated policies and procedures that the Board approves.<sup>102-31</sup>

Risk identification occurs in several ways. Teams and specialist staff across the business – including HSE, Finance, Governance, Economics and Sustainability - identify risks and work together as needed to assess impact and probability. The results are provided via briefings and advisory services to senior management, the Executive team and the Board of Directors. In the past year, this has included Board briefings and strategy discussions on topics such as Disruptive Technologies (e.g. Electric Vehicle Impact), Energy Storage, Renewable Energy, and Regulatory Changes in Oil and Gas Producing Regions.

## Measurement

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Board governance of risks, including economic, environmental and social risks, is self-assessed annually against our corporate performance scorecard indicators. These include both standard industry metrics and internal measures of performance that are compared to plans established by management and approved by the Board of Directors each year. <sup>102-30</sup>



## Evaluation and Adjustment

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Our corporate risk register is reviewed annually, and updated on an as-needed basis.



# Climate-Related Risks & Opportunities

We have aligned this discussion with the recommendations from the Task Force on Climate-Related Financial Disclosures.

## Governance

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**Board and Management Oversight:** Vermilion has reported publicly on climate risks and opportunities via our **CDP submissions** since 2014, with data back to 2012. These risks and opportunities are identified by key staff across our company, including our Health, Safety and Environment (HSE) team, Sustainability team, Government and Public Relations teams, Business Unit Managing Directors, and our Economist. All of these employees are experts in their fields, and gather a wide array of inputs that inform our analysis. These include research reports, external stakeholder organizations, government policy and regulation discussions, industry initiatives, communities, landowners, and the work of global bodies such as the United Nations, including the Paris Agreement, and the Organization for Economic Development.

Climate-related responsibility sits directly with the HSE team and the Sustainability team. These teams provide quarterly reports to the Executive team and the full Board of Directors. On our Executive team, our Chief Operating Officer is responsible for climate-related operations performance, such as emissions and HSE performance, and our Executive Vice President, People and Culture, is responsible for overall Sustainability performance.

In addition, the Chief Operating Officer, Director of Corporate HSE and Manager of Corporate HSE brief the Board's HSE committee, which meets three times per year. The Terms of Reference for the HSE Committee specifically include Review and Monitoring of Health, Safety, and Environment related Sustainability Initiatives. The executive and senior management have the ability to take various initiatives, research/results and other information to this group to validate operational/policy change or organizational direction adjustment.

The Board, as our highest governing body, has responsibility for reviewing all risks, including climate-related, and their implications for our business strategy and how we implement it, both in the short and longer term.

## Strategy

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*Best in Class Health, Safety and Environment* and *Integrated Sustainability* are two of Vermilion's six key strategic objectives, resulting in environmental considerations being engrained in all portions of our business. This provides corporate direction for programs that have the potential to enhance our performance and operational efficacy. The progress of these objectives is tracked on a monthly, quarterly and annual basis and shared across all levels of staff (Office staff, Field staff, management, senior management, etc.).

The decision in 2015 to establish Integrated Sustainability as a strategic objective supported previous alterations to our project management framework (site specific and play development level) to enhance aspects of sustainability and climate

change (regulatory change, enhanced water management, emissions reduction, footprint reduction / ecosystem fragmentation minimization). This has a direct impact on our long term sustainability strategy. The aspects of climate change that influence our sustainability strategy include, but are not limited to:<sup>201-2</sup>

- physical changes resulting from temperature change
- regulatory changes
- the need to adapt our operations to potential changing climate extremes, and
- the identification of green solutions in the communities where we live and work.

We are committed to reducing the impact our operations have, beginning with being compliant in all regulatory regimes, across all business units, while providing long-term growth and income to our investors. These are primary drivers for identification and implementation of climate change initiatives such as emission reductions and fuel efficiency.

Sustainability initiatives are assessed on a project-specific basis, including aspects such as the benefit to the communities where we operate, the benefit to the environment (reduced carbon emissions or fuel consumption, carbon offset, water reduction / reuse, etc.), and financial considerations.

Vermilion emphasizes projects that will have a positive, lasting impact both short term and long term. We leverage our successes to inform initiatives that are in the assessment, planning or initial implementation stages. Examples include (see our [Environment section](#) for further details):

- The cogeneration project in Vermilion's Parentis operation in France. Vermilion captures waste heat from our produced water stream to heat a local 15-hectare greenhouse that produces more than 6,000 tonnes of fresh tomatoes annually. This project was selected by the French Minister of Economy to be the recipient of the 2013 Circular Economy Award for Industrial and Regional Ecology, has been leveraged in an industry-wide research document and has now led to another geothermal project, focusing on eco-housing.
- We have identified several other potential geothermal projects that are in the assessment phase that will provide a low carbon energy option as a direct result of our operations and infrastructure. These types of projects have the potential to offset the financial impacts associated with the price of carbon, while providing either Vermilion or a third party with the ability to reduce emissions.
- Constructing Vermilion's corporate head office to the Leadership in Energy and Environmental Design (LEED) Gold standard. LEED® certification is a structured, audited process that assists design teams in aligning building construction and intent of "green" or high performance design.
- Adjusting long term operating strategies to ensure efficient and effective resource development. An example of this is the reduction of fresh water use in France (18% from 2015 to 2016).

## Risk Management

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Risks associated with climate change and environmental impact have been identified, with potential impacts quantified for each Business Unit, using our Enterprise Risk Management process. We report on those publicly through our annual CDP submission. This process is used to assess implications, identify mitigating measures and build a portfolio of business opportunities.

Vermilion's BU and asset risks are aggregated into the Corporate Risk Register. Risk is assessed through a grid matrix based on the anticipated impact severity and subsequent probability of an event occurring in consideration of the impact to people, the environment, financial results and social license to operate. Stakeholders considered in risk assessment

include, but are not limited to, internal (Executive, Board of Directors, employees, contract staff), and external parties (landowners, NGOs, investors, the general public, regulators, governments, industry groups).

Risks and opportunities are prioritized based on impact to the environment as well as monetary implications of identified climate change risks and potential project opportunities. Based on this information as well as business need, projects are prioritized in a manner that allows Vermilion to support healthy communities as well as augment our strong shareholder value.

Depending upon the business unit, risks cover such areas as regulatory changes, carbon pricing and taxes, community support, rising sea levels, increased severity of tropical storms, temperature increases, and potential for increased natural disasters.

Vermilion has undertaken a GHG Quantification Methodologies study and completed a global Carbon Liability Analysis for all Business Units (BU); this project is annually reviewed by Vermilion staff, and is undergoing a completely new analysis in 2017. The Carbon Liability Analysis factors in a number of potential regulatory, price point and taxation changes that are possible over the next several years. These documents detail the current emission generating activities (Scope 1, 2, 3) and details the liability and risk associated with the carbon footprint of operations in each BU. The types of emissions considered in this quantification survey include NO<sub>x</sub>, SO<sub>x</sub>, VOC, H<sub>2</sub>S, PM, BTEX, CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFC, HFC, and SF<sub>6</sub>. Vermilion completes fugitive emission assessments annually at select locations in Canada, France and The Netherlands.

**Scenario planning:** At a minimum, on an annual basis, and more frequently when required (such as daily during cyclone season), Vermilion examines and reassesses the risk associated with climate change and the potential effects on operations globally. This review considers the potential impact of a 2°C scenario, with these impacts included in our risk assessment process, including:

- Changes in temperature extremes
- Changes in precipitation extremes and droughts
- Sea level rise
- Tropical cyclones (hurricanes and typhoons)
- Carbon taxation
- Carbon sequestration requirements
- Emission reporting obligations
- Product efficiency regulations and standards
- Uncertainty surrounding new regulation
- Reputation, and
- Changing consumer behaviour

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 and cost of management, can be found in our annual CDP submission. Vermilion also proactively conducts operational and engineering reviews aimed at increasing efficiency, reducing emissions and monetary expenditure requirements at major facilities, which has resulted in the identification of a large number of opportunities.

**Carbon pricing:** The primary challenge associated with carbon pricing encountered is the rapidly changing geopolitical landscape, which has a direct impact on regulation and taxation schemes. As these have the potential for rapid change to

the price of carbon, Vermilion assesses the price of carbon on both a realized cost perspective as well as shadow pricing, and has identified likely carbon pricing scenarios for all of our operations. This work pertains to Scope 1 and 2, and is applicable to Scope 3 emissions, as these emissions have the potential to be impacted by an economy-wide carbon tax, such as the tax in Alberta.

- Vermilion currently considers the reasonable price for carbon in the short term (1-2 years) impacting our Canadian operations to be \$30 per tCO<sub>2</sub>e. This is based on the commitments made by the Alberta government relating to the economy-wide tax in place.
- In our European operations in the near and long term, we believe that a carbon price of 20-30 € per tCO<sub>2</sub>e, which aligns with the French government assertions relating to a floor on carbon pricing, is also reasonable for our Netherlands and German assets. This is subject to update as a result of 2017 changes in government and legislation.
- For our Australian operations, though we are not being impacted by carbon taxation, we believe the previously asserted cost of \$20 per tCO<sub>2</sub>e to be reasonable.
- Based on assertions made by the USA government, we do not believe our operations will be impacted by carbon pricing in the form of taxation; however, we consider \$20USD per tCO<sub>2</sub>e to be reasonable from a planning perspective.

The determination of carbon pricing currently resides with our Corporate HSE group. The process for determining pricing includes a review of current pricing assertions by governments and a review of published research relating to the Paris Agreements and potential carbon price requirements.

## Metrics and Targets

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We have reported on key climate-related metrics annually since 2012 (see [Performance Metrics](#)), including:

- Scope 1 and 2 energy consumption and greenhouse gas emissions
- Renewable Energy expenses and emission reduction
- Scope 3 emissions (since 2014, with increasing data coverage annually)
- Flaring and venting
- Water withdrawal (with zero withdrawal in high baseline water stress areas)

Climate-related performance feeds into our Corporate performance scorecards (STIP and LTIP Scorecards), which are used to assess overall corporate results and are major drivers in determining short and long-term incentives (bonus and share awards). Potential bonus is available to reward employees for personal contributions and achievement of organizational objectives. Environmental performance and performance against our peer group is a weighted component in annual bonus calculation and compensation reviews. Potential long term incentives are available to reward employees for achievement of long-term corporate objectives, promote sustained increases in shareholder value and drive achievement of long-term strategy. Performance against project goals and outcomes therefore impacts each employee's total compensation, including Vermilion's Executive Team.

## Current Targets

(additional details provided in our [Environment](#) section):

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Location	target	progress	details
Southeast Saskatchewan asset purchase in April 2014	Reduce flaring by 50% by 2020	204% achieved	In 2015 and 2016, through the construction of new infrastructure, operational changes and increased infrastructure runtimes, we have reduced emissions in our Southeast Saskatchewan assets by 75% since our acquisition.
The Netherlands	Vermilion set a target corporately to identify areas within our operation we could leverage green energy as a means to replace traditionally generated electricity. This grew from implementing solar and TEG powered lease sites across the Canada Business Unit to initiating ongoing and planned reviews of purchased power across our operations	100% achieved	On January 1, 2016, Vermilion began purchasing 100% green power from our largest power provider in our Netherlands Business Unit, resulting in a 97% reduction in Scope 2 emissions in that Business Unit from 2015 to 2016. This represents an estimated 39,145 tCO <sub>2</sub> e avoided based on 2015 emission intensity levels for purchased energy and 2016 energy consumption.
Global	Top quartile emissions intensity (lowest emission rate on a per BOE basis) when compared against our peer group	100% achieved	Vermilion's emissions reduction initiatives and activities have resulted top quartile performance when compared against our peer group.

Given our successful meeting of targets to date, we are assessing global, science-based target setting, and will continue this work into 2018.

# People Dashboard

## 3.4 Reduce premature mortality through prevention and treatment, and promote mental health and well-being

Vermilion supports this through access to preventive health care, including supplementary medical coverage for all permanent employees, access to mental health care, support for safe and healthy surroundings and lifestyles.



## 5.4 Recognize and value unpaid care and domestic work and shared responsibility

We offer key family friendly work options, including a strong parental leave program, vacation purchase program, flexible working hours, and the ability to work part-time with benefits.



## 8.2 Achieve full and productive employment and decent work for all women and men

We offer a full range of workforce protections, including respect for labor rights, detailed codes of conduct, robust compensation and benefits program, and a range of options for training and development.



Annual Targets	2016	2017
100% of permanent employees participating in an annual performance review and development plan	93% achieved	92% achieved
Strong employee participation numbers in the Great Place to Work survey in all of our participating jurisdictions	92% response rate	88% response rate

# Key Metrics

## TOTAL WORKFORCE

At December 31, 2017, our global team comprised 685 people, compared to 661 at December 31, 2016. In 2017:

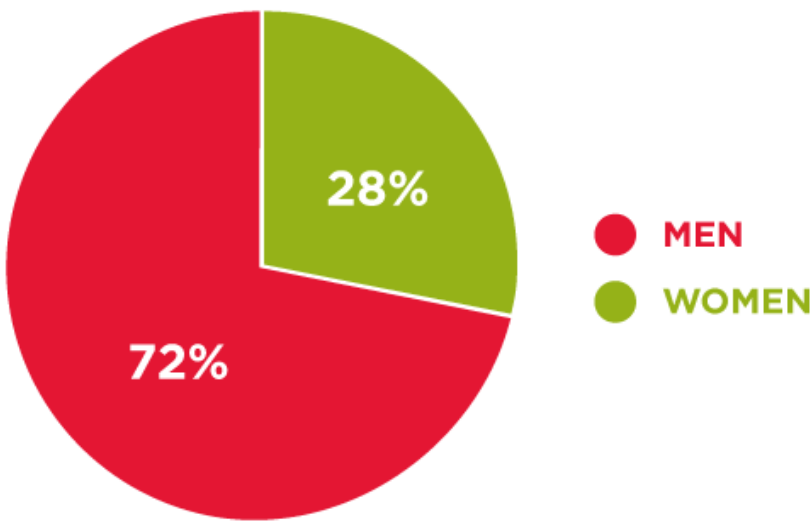
- Permanent employees accounted for approximately 82% of our workforce
- We had 69 internal moves globally, via 21 lateral moves, 32 promotions and 16 contract conversions.
- We had 75 new hires, including the 16 contract staff who were converted to permanent status. <sup>401-1</sup>

## WORKFORCE BY BUSINESS UNIT

41% of our workforce is located in North America, 46% in Europe and 13% in Western Australia.

## WORKFORCE DIVERSITY

Our workforce gender split is slightly more balanced than that of the global oil and gas industry, which reported 22% women according to a 2017 study by The Boston Consulting Group and the World Petroleum Council.



## WOMEN IN LEADERSHIP

Although we do not currently have a formal policy in place addressing the representation of women in senior management positions, two out of 10 (20%) Directors on our Board are female and one out of four (25%) of our senior management team is female. In 2018, 16% of leadership roles at Vermilion were held by women. We are continuing to focus on supporting more women to reach leadership positions; this includes developing our high potential female employees through the creation of a mentoring program that launched in 2018. This program matches participants with members of the Vermilion Management Team (Executives and Direct Reports of Executives).

## TURNOVER

By nurturing and protecting our culture, we believe we attract and retain the best of the best. Our successful efforts are best measured by our consistently low voluntary turnover rate. In 2017, our voluntary turnover rate was 3.7%, retirements were 3%, and total turnover was 8.7%.<sup>401-1</sup>

## TRAINING AND DEVELOPMENT

In 2017, our formal training and development constituted 8,526 hours.



# Our Approach to People

## OUR APPROACH TO PEOPLE, AND WHY IT MATTERS

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Our overall focus is on building a team of highly motivated, empowered people who work together to deliver superior results and make Vermilion a great place to work. Because we view our strong culture as the single most important factor in our long-term success, it influences everything we do, which is why we focus on:

- Preserving the key components of our culture and finding ways to keep our people highly engaged and satisfied
- Offering unique career development opportunities that lead to superior attraction and retention of talented people
- Offering flexibility to address the diversity of our people, and
- Being proactive in resourcing our business to meet both current and future demands.

We recognize that our staff are key to achieving our operational and business goals. It is therefore of paramount importance to ensure our staff are motivated and resourced to support high performance, integrity and teamwork.

## MANAGEMENT

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We are committed to maintaining Vermilion's position as a workplace of choice, to enable us to attract and retain high quality staff. This includes offering competitive compensation and benefits packages, providing a safe and respectful work environment, and sustaining our strong culture.

### Recruitment

We look internally to fill job postings wherever possible, to provide our staff with career advancement and/or development opportunities. When we recruit externally, we look for employees with strong technical skills and creative ision who want to work in a highly collaborative and dynamic environment.



## Onboarding

Our onboarding process is designed to make our new team members feel immediately welcome and to integrate them quickly into our culture. This includes reviewing our People, Code of Business Conduct and HSE policies, reviewing compensation and benefits, ensuring IT systems are available when they arrive, and providing key information about our company and our culture to help them feel at home.

## Compensation and Benefits

A market-competitive compensation and benefits approach is one way we acknowledge the value our people bring to Vermilion. Our programs are designed with commonality across all geographies where possible, with alignment to local markets.

All permanent employees are offered a competitive base salary, short- (bonus) and long-term incentive plans, and a pension or retirement-like scheme. Short- and long-term incentives are associated with both individual and company performance, and are linked to specific corporate metrics for all employees, senior management team and our board of directors. These metrics include key sustainability and HSE performance indicators, supporting our priorities of safety and environmental protection.

We strive to foster workforce well-being through competitive health and wellness benefits. In Canada, for example, these include a taxable lifestyle account and tax-free health care spending account; health, vision and dental plans; short- and long-term disability benefits; basic and dependent life insurance plans; critical illness and "best doctors" insurance; parental leave, plus company-paid access to an employee family assistance program. 401-2 401-3

In many of our business units, staff have the option to purchase additional vacation days. The Vacation Purchase Policy was introduced in 2016, in response to employee feedback requesting additional flexibility to support work-life balance and family life.

To learn more about Vermilion's compensation and benefits plans, please see our annual Proxy Statement and Information Circular.

## Communication

Communication is critical to building a strong and respectful culture, where employees understand Vermilion's corporate goals and the key role they play in helping to achieve them, and where the company in turn understands what is important to staff.



We have a culture of open, two-way communication at Vermilion. Leaders make themselves available to staff, and staff feel comfortable approaching leaders. Members of our senior management team also make regular visits to our field and international business unit locations, to help staff throughout the world feel part of a whole. Through the annual **Great Place to Work** survey, our people often tell us that they value the approachability of our leaders at Vermilion, and that they feel heard.

**VETnet:** Our corporate intranet (VETnet) is a key communications channel, offering both global and local news. In 2017, in response to requests from staff, we expanded its original languages of English and French to include Dutch and German. Content generation and publishing is a shared responsibility amongst stakeholders from across the organization, and we take a centrally managed approach to ensuring the editorial content remains fresh and informative, ranging from corporate news to community investment activities in all our locations. Every VETnet page features a Suggestion button, which staff can use to make suggestions or raise concerns. We respond to these suggestions within one business day.

**Quarterly Town Halls.** These meetings, which focus on updates from Business units and key areas such as HSE and Community Investment, feature leaders and staff from around the world presenting our progress and plans, and are transmitted and archived globally so that staff can access them regardless of location and time. A confidential staff pre-survey provides staff with opportunities to raise questions and make suggestions to the senior management team, who participate in a Q&A panel at the town halls where they answer these questions, and any others that are raised during the town hall. A confidential post-survey provides staff with a forum to provide feedback on the effectiveness of the town halls, the interest in the topics presented, and suggestions for future content. These components are an excellent way for questions, concerns and suggestions to be raised, as the staff feedback is incorporated into ongoing company strategy discussions.

**Quarterly CEO Updates.** Our President and CEO provides business updates every quarter via email to all staff, highlighting our performance and priorities.

## Works Councils

In France and The Netherlands, companies with more than 50 employees benefit from participation in a Works Council, which helps guide the employee-employer relationship. Works Council members are elected by employees to represent the workforce in discussions with the company on changes that affect the work environment, job expectations or benefits. They can also bring forward suggestions, grievances and concerns. A Works Council has been in place in France since 2006, and was established in The Netherlands in 2015 after we reached the applicable staff threshold levels there. In Germany, Works Councils can be established in companies with more than five employees; our Works Council was established there in December 2016. <sup>102-41</sup>

## Fair Culture

Ensuring that Vermilion has a positive, healthy and safe work environment is our top priority. That means it's essential to have fair and consistent procedures to review, document and resolve events or potential violations of company policies and guidelines or local laws.

We therefore have Fair Culture policies outlining these procedures that apply to all Vermilion staff and third parties performing work in all of our Business units. <sup>102-16</sup>

Fair culture is about understanding human involvement in relation to events in a way that:

- Encourages organizations to learn from their mistakes
- Identifies the underlying causes of events involving human error
- Fairly assigns responsibility and consequences to individuals and leaders following an event
- Rewards behaviors that meet or exceed expectations, and closely examines and addresses non-compliance, and
- Identifies appropriate organizational resolutions to address the underlying causes of events.

Our Fair Culture policies create a balanced approach to assessing organizational, leader and employee accountability, helping to align Vermilion with industry best practices and positioning us as a leader in creating a balanced and transparent culture.

## Performance Management

Our compensation philosophy and program objectives are the same for all staff, and are laid out in detail in our Information Circular and Proxy Statement annually. Each employee and executive is eligible to participate in our compensation program, including: base salary, short and long-term incentives, which we believe strengthens our organizational alignment consistent with shareholder expectations. We target total compensation between median and top quartile, depending on company and individual performance. Four objectives guide the design of Vermilion's compensation plans:

- Ensuring our operations worldwide are sustainable under a range of commodity price environments and when changes occur in our workforce;
- Allowing us to attract and retain high-calibre employees that are important to our success;
- Rewarding all employees and executives when their performance and the company's performance is top quartile; and
- Aligning compensation programs with our strategy to ensure prudent risk taking.

We measure both corporate and individual performance in similar ways, with a range of outcomes from underperform and developmental to good, commendable and exceptional. For our employees, the performance management process includes:

- Setting clear expectations for performance;
- Communicating performance and development goals, and career aspirations;
- Identifying opportunities to learn and grow;
- Providing ongoing feedback;
- Evaluating results and how they were achieved; and
- Recognizing accomplishments.

Individual performance is tied to the six strategic objectives within our business strategy (Extraordinary People, Best-in-Class Health, Safety and Environment (HSE), Top Quartile Shareholder Returns, Robust Portfolio, Operational Excellence and Integrated Sustainability). In this way, performance measurement and, in turn, compensation are tied directly to the metrics that underpin the strategic objectives, including those for HSE and sustainability. These include both standard industry metrics and internal measures of performance, and are discussed annually in the Information Circular.

## MEASUREMENT, EVALUATION AND ADJUSTMENT

As a high-performing, global organization, Vermilion uses an integrated, web-based people information system that enables employees to easily manage their personal information while providing leaders access to required information on their teams. This system supports our focus on Extraordinary People, one of the six strategic objectives that comprise our VETVision business strategy, by providing staff immediate access to information they need.

Consistent and growing use of the system across the organization has enabled us to capture, verify and report significantly more data since 2012/2013.<sup>102-49</sup>

We use a variety of checks and indicators to ensure that our People programs are achieving our goals:

- Voluntary turnover rates
- Ease of finding qualified candidates
- Analysis of results from **Great Place to Work** staff survey, including department and team workplans that respond to staff concerns and suggestions
- Monitoring of and action in response to staff suggestions via the intranet
- Market surveys to ensure we remain competitive
- Analysis of changing legislative or regulatory requirements
- Gap analysis for performance metrics

In 2017, we assessed our programs in light of the UN Sustainable Development Goals, identifying opportunities to drive key targets within the Goals that are aligned with our People Approach. This showcased the importance of SDGs 3.4, 5.4 and 8.2, as referenced on our Dashboard page.

We adjust our People policies as needed to ensure we remain competitive with our peers, aligned to changing regulations, and responsive to staff requests.





# Performance Management, Training and Development

## OUR APPROACH, AND WHY IT MATTERS

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Our robust performance management system, along with our focus on learning and development, contributes to our overall philosophy to support our people to develop not only the skills they need for their current job but those that will benefit them throughout their career. We take a lifelong learning approach, combined with annual identification of specific performance and development goals for all permanent employees.

We believe that powerful development involves a combination of:

- Work experiences – on-the-job training through varied projects and roles
- Relationships – coaching and mentoring from others and connecting with external networks, and
- Formal training – specific training courses and conferences.

Providing opportunities for job-related training, along with career and personal development, is a critical element of employee engagement, building productivity and contributing to staff attraction and retention.

## MANAGEMENT

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Vermilion is committed to engaging and supporting employees as they identify and achieve career and development goals. Our performance management program is a yearly cycle that involves setting clear expectations for performance, identifying opportunities to learn and grow, providing ongoing feedback, evaluating goals, and recognizing accomplishments.<sup>G4-LA11</sup> To support this, we provide informal and formal



training and development opportunities that fulfill both company and employee needs. G4-LA10

We place high importance on our performance management program, as it supports two-way communication between leaders and staff, and we aim for 100% participation for permanent employees.

The process begins at the start of the year, when our people identify their performance and development goals, career aspirations and mobility interests through our *Driving Excellence – Plan Forward* process. Performance goals are tied to our six key strategic objectives, ensuring that employees know how their work supports the company, and how they make a difference to our success. Evaluation of individual performance, in terms of the results achieved and how those results were accomplished, is done via a mid-year checkpoint and then through the *Looking Back – Performance Review* process that occurs at year-end.

Performance conversations and ongoing feedback between leaders and staff throughout the year are key ingredients to ensure performance is on track and recognized.

**WE KNOW THAT WHEN WE DEVELOP OUR PEOPLE, WE BENEFIT NOT ONLY OUR STAFF BUT THE WHOLE COMPANY, AS IT HELPS US TO RETAIN AND ATTRACT THE BEST TALENT IN THE INDUSTRY.**

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Our international presence also provides selected staff unique opportunities to work on assignment, helping to broaden their operational expertise and understanding of our global operations while sharing key specialist expertise among our locations.

## MEASUREMENT, EVALUATION AND ADJUSTMENT

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We use strong workforce and succession planning processes that identify company needs for skills, knowledge and experience, cross-referenced to our performance management process.

This creates an opportunity for us to identify potential career paths for staff within Vermilion, and areas where we may need to recruit externally for specific positions. Together with the Great Place to Work feedback, it also provides input to our training and development activities, and has led us over the past several years to strengthen training offerings in such areas as personal development and key HSE courses, and to expand our lunch 'n' learn program to topics such as reserves, investor relations, and employee benefit programs.

In addition, our ongoing evaluation has allowed us to target increased communication on key performance management topics.



# A Great Place to Work

## OUR PEOPLE TELL US VERMILION IS A GREAT PLACE TO WORK!

Vermilion continues to demonstrate excellent results in the Great Place to Work Institute's® Best Workplaces competition, which we use as a tool for continuous improvement in our culture and people practices.

In 2018, Vermilion was recognized as being among the:

- Top 40 Best Workplaces in Canada, one of only two energy companies to be recognized out of more than 300 participating Canadian companies
- Top 25 Best Workplaces in the Netherlands
- Top 10 Best Workplaces in Germany (Berlin-Brandenburg Region).

The rankings are based on the Institute's two-fold approach, which includes an independent assessment of our culture along with our employees' confidential responses to the Institute's survey.

**Our rankings – and staff participation rates – have remained strong since we began our involvement with the Institute. Our 2018 global participation rate for employees was 88%.**



In part, we attribute our strong results to the importance we place on reviewing and addressing the staff feedback shared through each business unit's annual survey. We believe this is so important that we ask staff in all business units to participate in the survey, regardless of whether their staff count meets the minimum requirement to compete for Best Workplace recognition. This is the case in Australia and the United States, where our staff count is below the qualifying threshold.



Through the survey results, we gain a strong understanding of why our people choose to come to Vermilion, what they value and why they choose to stay. Competitive total compensation, exciting opportunities for growth and development, and pride in how we give back to the communities where our people live and work continue to be reasons why our voluntary turnover rate is among the lowest in our industry.

**Here are just a handful of unabridged comments from staff on what makes our company a great place to work:**

*When my child was hospitalized, management told me to take the time I need and we can work out the time off later. My manager did not want me to worry about work and wanted me to go be with my child because he needed me and this was more important.*

*Our team operates like a small junior company within a larger corporation, making decisions on the fly and executing on ideas with support of the upper management. This style of managing the asset is very empowering to the team, and makes it feel like we can make a difference in the assets that we have to work on.*

*I have been at this organization for less than 2 years and the feeling I get is that I have now have an extended family with people that care. It's a great feeling to know that corporations like Vermilion do actually care about employees.*



## Feature: Energy Apprenticeships

Vermilion is playing a key role in an industry partnership in Australia that has created a standardized education and training program to increase the supply of safe, skilled workers. It's already making progress: the first Energy Apprenticeships Group Academy (EAGA) class started training February 2016 and will enter the workforce in 2020, employed at oil and gas facilities across Australia.

The EAGA program operates in addition to Vermilion's own apprenticeship program, but focuses on those leaving secondary (high) school. Approaching people at this early stage in their work life provides an opportunity to raise awareness of the potential benefits of work in the industry, particularly among young women.

The partnership is focused on addressing future workforce requirements through collaboration to achieve cost-effective and sustainable results. This includes Vermilion and other industry leaders from Shell, Woodside, and Quadrant, along with Energy Apprenticeships Group and the Challenger Institute of Technology's Australian Centre for Energy and Process Training.

Together with the Resources Industry Training Council, they formed a steering committee to provide guidance and direction for the project. Graduates of the four-year course will have:

- Formal qualification, in engineering and Process Control training packages
- Life skills training (conflict resolution, etc.)
- Underpinning knowledge in oil and gas systems
- Secondments to operational workshops (valves, pumps, etc.)
- Secondments to live oil and gas facilities

Candidates take part in ongoing assessment and reporting to measure their progression and ensure they are meeting milestones on their training plan, with oversight from the industry-driven steering committee. EAGA adopts best practice methods for the recruitment and support of Aboriginal and Torres Strait Islander people, which includes a full-time advisor offering pastoral care and collaboration with indigenous communities. Where applicable, the EAGA model can be adapted for indigenous-only pathways.

**2017 Update:** Two new Process Operator Trainees began their first swing on Wandoo in October 2017 as part of the Energy Apprenticeship Group partnership. The trainees have spent the last 2 years at the ACEPT training facility completing the Certificate III in Process Plant Operations and various site visits.

At Wandoo, they are working within the operations team to gain experience in the process on the platform as well as Vermilion's culture.



## Feature: OECD: Inclusive Growth

Vermilion was honored to participate in the launch of **the OECD's Roundtable on Inclusive Growth and Business**, which brought together leading experts on sustainability and business, and provided important recognition of our work in this area.

The Inclusive Growth Roundtable, held at OECD headquarters in Paris on Nov. 15, 2016, was an initial conversation on inclusive growth and how the business community is addressing it. Participants included the General Secretary of OECD, the State Secretary of Labor and Education for Slovenia, the Chairman of the White House Council of Economic Advisers, as well as Ambassadors and Ministers from OECD member and partner countries, and selected business leaders Danone and Vermilion Energy.

[More information](#)

### How does Vermilion define inclusive growth?

For Vermilion, inclusive growth means making sure that everyone has an opportunity for economic advancement, regardless of their economic class, gender, religion or disability. We look at this as long-term capacity development, focusing on productive employment for our employees, contractors and local suppliers.

We also undertake environmentally sustainable development, having examples of these projects in several countries. And, we stress strategic community investment in the locations in which we operate, identifying critical community needs where our financial contributions and our employees' volunteer time can make a difference.



Inclusiveness is focused on equality of opportunity and capacity-building for our local labor force, our business partners that supply us, and our local communities. Here are a few examples:

- In Parentis, France, we began a project in 2008 to take unused heat energy from the produced water in our oilfield operation, and use it supply heat to a new tomato greenhouse industry. We are heating this greenhouse free-of-charge and free of carbon emissions for 25 years, which has made the greenhouse operation profitable to build and operate, and certifiable as an eco-greenhouse. This original investment has catalyzed a large tomato industry in Parentis, which now represents 27 hectares, 350 long-term jobs, €37 million invested in economic diversification, and 15 million kilos of tomatoes each year. It also saves 15,000 tonnes of CO<sub>2</sub> emissions per year, and is the largest tomato production in France from non-fossil fuel sources. It received the Minister of Ecology's "Circular Economy" award in 2013, and is an excellent example of the oil and gas industry:
  - Creating new jobs in a new industry
  - Making both industries (oil and agriculture) more sustainable, and
  - Reducing greenhouse gas emissions while increasing economic development.
- Another example is our "Eco-neighborhood" being built in La-Teste, France. This is a 30-year partnership with the city and a local developer to use our recycled geothermal energy to heat 450 apartments. This saves 50% of the heating bill for the residents, and a third of the apartments are reserved for low-income social housing. It also saves 650 tonnes per year of CO<sub>2</sub>.
- We also support programs and contribute volunteer time to an Early Childhood Development Centre in a rural oil-producing area in Canada that had no such programs before.
- In The Netherlands, our flagship program focuses on a non-profit called JINC, a national program to assist underprivileged children between 8-16 to stay in school and develop their careers. JINC's motto is "Every child deserves an equal chance to find a job."
- In France, we are supporting a mentoring program called NQT, designed to provide mentoring and job skill assistance to recent college graduates from modest social environments, particularly in inner-city and poorer rural areas.

Projects such as these are demonstrating that green growth, sustainable growth and inclusive growth go hand-in-hand. They have carbon emissions, developed co-industries that can last for long periods of time, and led to substantial increases in employment, often in under-developed small-town and rural areas.



## HSE Dashboard

[Click here](#) to see our SDG integration with Safety



[Click here](#) to see our SDG integration with Environment



In 2017, we met all of our corporate leading HSE Key Performance Indicators (KPIs) and our individual business units met or exceeded all of our leading HSE KPIs. Our 2016-2017 HSE accomplishments are an indicator of our progress towards realizing our HSE vision. These include:

KEY HSE PILLAR	2016-2017 ACCOMPLISHMENTS
HSE Culture	<ul style="list-style-type: none"> <li>➤ Conducted our second global HSE Perception Survey; overall participation rate of 95%, with all 10 safety factors returning favorable (above 3.5/5) results; working to develop corporate and business unit improvement plan</li> <li>➤ Guided 5,665 hours of HSE-related training</li> <li>➤ Completed HSE leadership training for Canada corporate functional leaders, front-line supervisor, rig, construction and operators, and management teams in The Netherlands, Germany, Central and Eastern Europe, and US</li> </ul>

<b>Communications &amp; Knowledge Management</b>	<ul style="list-style-type: none"> <li>➤ Ongoing development and implementation of Operator Competency Program in Canada and France</li> <li>➤ Review and update of OCP in The Netherlands</li> <li>➤ Development and implementation of online training modules in Australia</li> </ul>
<b>Technical Safety Management</b>	<ul style="list-style-type: none"> <li>➤ Implemented Process Hazard Analysis Standard</li> <li>➤ Initiated update to Corporate Risk Management Manual</li> <li>➤ Completed Process Safety Management System draft</li> <li>➤ Updated Asset Integrity manuals</li> </ul>
<b>Incident Prevention</b>	<ul style="list-style-type: none"> <li>➤ Developed Individual Responsibility Awareness Initiative</li> <li>➤ Enhanced emergency response, including global callout system implementation and online ERP manual</li> </ul>
<b>Operational Stewardship &amp; Sustainability</b>	<ul style="list-style-type: none"> <li>➤ Achieved CDP Climate Leader “A” List in 2016 and “A-“ rating in 2017; we are the only Canadian Energy Sector company, and one of only two in North America, to achieve a Leadership Level score in 2017 (Top 3%)</li> <li>➤ Launched new carbon liability analysis to enhance emission management processes</li> </ul>

# Our HSE Approach and Management

## Our Approach to HSE, and Why It Matters

Our HSE Vision is an extension of our core values of Excellence, Trust, Respect and Responsibility, and reflects our commitment to conducting our activities in a manner that ensures the health and safety of our people and those involved directly or indirectly in our operations.

This is Vermilion's highest priority. Nothing is more important than the safety of staff, partners, suppliers, communities and all those who work with us.

Protecting the environment immediately follows safety in our priorities. While this presents as a critical operational risk from an adverse environmental incident, it also offers important opportunities to improve technology and processes to both protect the environment and contribute to operational excellence and return to shareholders.<sup>413-2</sup>

We operate by the mantra of "HSE: Everywhere. Everyday. Everyone." because we believe that striving for a healthy workplace free of incidents is key to efficient and successful operations that will continue to generate strong returns to our employees, shareholders and the communities that we operate in. When it comes to HSE, protecting our people and the places they work, play and call home is what really matters most.

## Management of HSE

### HSE Policy

Our HSE Policy is also our promise.

It applies to all Vermilion activities, and provides an overall commitment to key principles for managing health, safety and the environment. The policy, which is the basis for Vermilion's HSE objectives and targets, outlines the overall direction of our organization with respect to HSE and contains a commitment to continuous improvement:

*Vermilion is committed to ensuring we conduct our activities in a manner that will protect the health and safety of our employees and contractors, and the public. Our HSE vision is to fully integrate Health, Safety and Environment into our business, where our culture is recognized as a model by industry and stakeholders, resulting in a workplace free of incidents.*

## Our HSE Vision

To fully integrate Health, Safety and Environment into our business, creating a culture recognized as a model by industry and stakeholders, resulting in a healthy workplace free of incidents.



*Vermilion will maintain health, safety and environmental practices and procedures that comply with or exceed regulatory requirements and industry standards. Vermilion's HSE actions will reinforce our corporate Core Values of Excellence, Trust, Respect, and Responsibility.*

*Vermilion Energy will:*

- *Maintain a strong integrated Health, Safety and Environmental Management System to identify and manage risks;*
- *Accept responsibility and accountability for providing leadership, visible commitment, and direction to meet our HSE performance targets;*
- *Continuously evaluate and improve policies and operating practices;*
- *Integrate HSE into business objectives;*
- *Provide every employee and contractor with a safe and healthy workplace;*
- *Make a positive contribution to the protection of the environment and seek improvements in the efficient use of natural resources;*
- *Respond promptly, responsibly and effectively to emergencies;*
- *Focus on continual improvement of HSE performance;*
- *Ensure open and timely HSE communication with all stakeholders;*
- *Ensure the resources necessary to support this policy are provided.*

*Hazard awareness, incident prevention and environmental awareness comprise an integral part of any job. It is a joint effort that requires continuous support of everyone who works at Vermilion. The protection of health, safety and the environment must be a key part of the planning and execution of every task. All those engaged in work for Vermilion shall be aware of this policy and its contents, and shall commit themselves to its implementation.*

## HSE for All

We require third-party contractors and sub-contractors – our vendors – to be HSE pre-qualified prior to commencing service work. This helps ensure that they have an HSE program in place that meets or exceeds our requirements. We also observe and interact with our vendors on an ongoing basis to ensure that they are adhering to Vermilion's HSE practices, procedures and rules.

We hold mandatory monthly HSE meetings in every field district that all staff (field and administration) attend and senior management routinely participate in. On a quarterly basis, the HSE district meetings are replaced by HSE-focused town hall meetings that include our vendors (third party contractors). This practice, which has been in place since 2011, has resulted in a better understanding of Vermilion's HSE requirements, and an improved understanding of where and how we can provide better support to our vendors.

We also strive to engrain safety awareness throughout all facets of the organization, not just in our field operations. We believe our HSE mantra emphasizes that keeping people safe isn't just up to the HSE or operations departments, but involves every individual, whether they work as a technician in the field, an accountant in the office, or as a volunteer in the community during a Day of Caring.

To support this, we hold quarterly HSE Leadership meetings at the corporate level, with participants that include our senior management team and HSE advisors from all divisions and subsidiaries, representing 100% of our staff.

## 5 Key HSE Pillars

There are clear linkages between strong HSE performance and strong business performance. We consolidate our efforts and focus on five key pillars of HSE performance, because this enhances our ability to advance our HSE priorities and reduce our risk, which in turn helps us ensure worker and public safety, environmental protection, and the delivery of superior business results. Within each pillar, we have developed longer-term outcomes to articulate what we want to achieve now and in the future:

KEY HSE PILLAR	VET VISION OUTCOMES
HSE Culture	<ul style="list-style-type: none"> <li>➤ Management and the workforce are actively involved in delivering HSE performance &amp; improvement</li> <li>➤ The organization looks at what might go wrong and takes steps to prevent it</li> <li>➤ The organization creates an environment of empowerment, trust and accountability</li> </ul>
Communications & Knowledge Management	<ul style="list-style-type: none"> <li>➤ Continuously learns and shares information to improve performance</li> <li>➤ Values training and validates competencies</li> <li>➤ Demonstrates reliable data systems, analysis, trending and generation of improvement actions</li> </ul>
Technical Safety Management	<ul style="list-style-type: none"> <li>➤ Has a broad array of systems and practices to identify hazards and manage / reduce risks</li> <li>➤ Demonstrates regulatory compliance</li> <li>➤ Provides important organizational focus to low probability, high consequence events</li> </ul>
Incident Prevention	<ul style="list-style-type: none"> <li>➤ Focuses on proactive measures for incident prevention. Responds promptly to hazards and takes immediate action</li> <li>➤ Intervention is seen as a positive action</li> </ul>
Operational Stewardship & Sustainability	<ul style="list-style-type: none"> <li>➤ Integrates sustainability policy and practices into business strategies and performance measures</li> <li>➤ Considers that HSE and sustainable development has a direct correlation to business success</li> </ul>

Our Hse Framework

THREE MANAGEMENT SYSTEMS FORM THE INTEGRATED FRAMEWORK OF VERMILION’S HSE CULTURE.

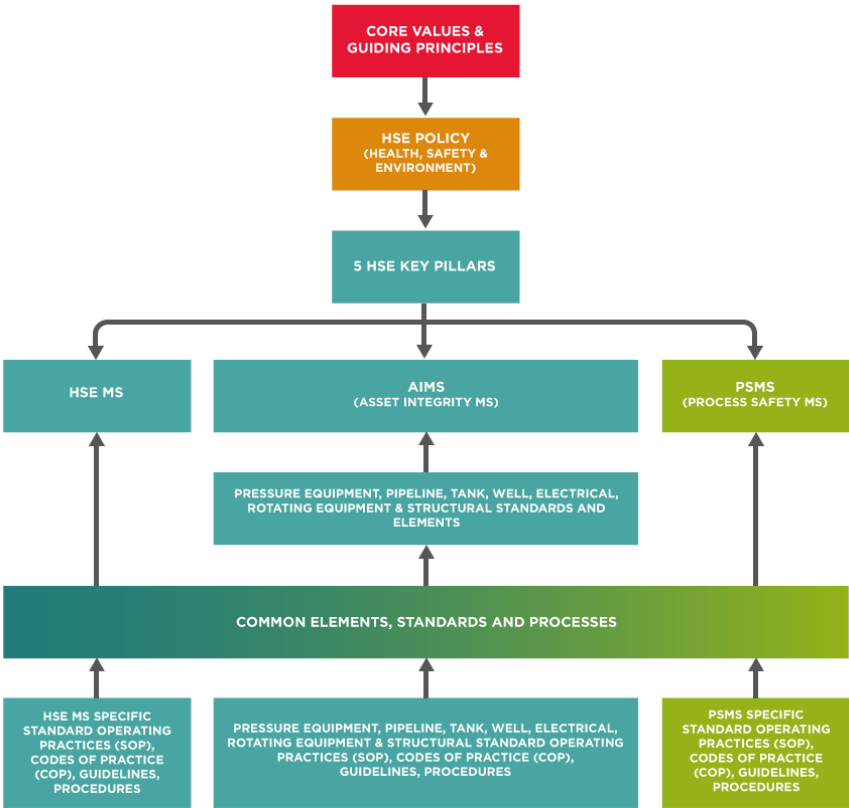
Our HSE Management System (HSE MS), Asset Integrity Management System (AIMS) and Process Safety Management System (PSMS) provide the formal structure that helps us foster a workplace culture at Vermilion where HSE is always a priority.

HSE Management System

HSE MS provides the structure for the delivery of our HSE policy and commitments, including areas of corporate ownership and responsibility, with the objective to increase consistency across the organization in its development and implementation. By following the HSE MS’s action steps of Plan, Do, Check & Correct – which provide a process for continual improvement – we identify and manage health, safety and environment hazards and risks associated with our company’s global operations.

Asset Integrity Management System

AIMS serves as the framework of processes and procedures that helps us execute safe and reliable asset operation. Through AIMS, we understand when work on an asset needs to be performed, how much it will cost, and where to start. Perhaps even more importantly, it helps us understand the impact and cost if no action is taken. Adherence to quality standards and practices, effective testing and inspection of equipment, quality of spare parts and repairs, and correct control of operating parameters are all within the scope of AIMS. A successful AIMS helps us improve operational safety, reduce spill volumes and frequency, increase overall reliability and life expectancy of assets through cost effective measures, assure proper management of high risk assets, implement best practices in managing our assets, and ensure compliance with regulatory requirements.



## Process Safety Management System

PSMS serves as the “backbone” of how we manage process safety. This is a blend of engineering and management skills focused on preventing high impact, low probability events and near misses, such as fires, explosions, well blowouts and damaging releases associated with the loss of containment of energy or dangerous substances. Our PSMS is comprised of 14 interactive elements that identify key responsibilities and requirements, and is based on a Plan-Do-Check-Correct cycle. This helps us identify hazards, manage risk, eliminate or mitigate potential environmental impacts, operate safely and reliably, develop and share best practices, drive operational discipline, and support continuous improvement.

# HSE Measurement and Evaluation

## MANAGEMENT, EVALUATION AND ADJUSTMENT

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Our Board of Directors maintains oversight of HSE performance through its HSE Committee, which has regular and direct communications with our Executive and senior management teams. HSE commitment and leadership is engrained in Vermilion's leaders, through visible and active participation. They set the tone, provide the vision and resources required to achieve our HSE objectives, and actively participate to ensure the importance of HSE is well understood and a high standard of compliance is maintained.

The foundation of our measurement is our corporate Event Management Information System (EMIS), called iTrak, which collects information from each of our operations about potential hazards and the actions taken to resolve them. This includes all health, safety, environmental, regulatory and public complaint incidents, near misses, unsafe acts and conditions, their root causes, actions taken, and preventive measures to avoid such incidents in the future.<sup>403-2c</sup>

Because of the potential risk to our people, the public and the environment, our President and CEO, COO, EVPs and other key senior leaders are immediately informed of all high potential near misses, recordable injury events and serious incidents entered into our EMIS. This reflects the critical importance of HSE at Vermilion. Lost time incidents and serious events are also reported to all staff throughout the company, with a focus on key learnings and prevention.

We have also established key performance indicators for HSE, which are reported internally on a real-time, monthly, quarterly and annual basis, with select metrics included in our sustainability reporting. Leading indicators (inputs) include elements such as HSE inspection/audit, finding closeout, compliance/regulatory inspections and emergency response exercises. Lagging indicators (outcomes) include elements such as lost time incidents, total recordable injuries, motor vehicle accidents, liquid spills and release volume, and emergency response plan effectiveness.

Our data collection, methodologies and tracking have consistently improved since our first public reporting from the years 2012 and 2013. This baseline has progressed into trend analysis and beyond. It now allows us to assess a detailed set of analysis associated with identified hazard exposure and root cause, with particular consideration given to our top fatal risks, allowing us to identify additional areas for improvement.

Vermilion uses a variety of HSE performance measurements that provide timely information on the progress and current status of the strategies, processes and activities we use to manage risk and safety. We focus our efforts on the development of meaningful leading indicators that tell us how effective we are at identifying and reducing hazards in the workplace. Our leading indicators include activities such as contractor observations, site inspections, management and staff participation in safety meetings and site visits. They also measure the development activities influencing safety performance and continuous improvement.

We recognize that to adequately assess HSE performance, we need to take a balanced approach by also

measuring outcomes, such as recordable injuries. However, we realize that such lagging indicators are reactive in nature, can be a poor gauge of prevention, and sometimes may lead to falsely interpreting low injury rates as an absence of risks in the workplace. Because of the drawback associated with this type of metric, we prefer to concentrate our energy towards more proactive performance measures.

Our HSE KPIs are included in the calculation of our Corporate Performance Scorecards for both 1-year and 3-year performance. As such, they directly impact employee and senior management team compensation. (For more information, see our [Leadership section](#).)

We also use the analysis of results from our staff HSE Perception Surveys, and audit and compliance reviews, to understand areas for further development. This feeds reviews and improvements to our HSE MS and our sustainability work.

# HSE Training

One of Vermilion's HSE Pillars is Communications & Knowledge management. This provides important focus for continual learning and sharing of information to improve our performance and helps validate competencies across the organization.

## HSE COMPETENCY FOR LEADERS

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Vermilion is committed to ensuring all of our staff and leaders understand the importance of HSE and demonstrate this in their actions. All Vermilion's leaders – whether operational or non-operational – contribute to Vermilion's success by generating HSE awareness, identifying hazards, and understanding and mitigating the HSE impact of requests made of staff and operations. That's why our Performance Management system includes an HSE Competency for Leaders:

### Demonstrates HSE Leadership:

- Visibly acts in accordance with all HSE policies, standards, procedures, legislation and core values
- Engages staff to identify and mitigate hazards and risks in order to fully integrate HSE into Vermilion's day to day culture, and
- Facilitates the sharing of HSE lessons learned.

In practice, we expect our leaders to act in accordance with all HSE policies, standards, procedures, legislation and core values, and to:

- Understand HSE requirements, make them a priority and integrate them into daily activities
- Walk the talk, not hesitating to intervene for the safety of all staff
- Report unsafe situations, be willing to be challenged and follow up on commitments, and



- Believe in continuously learning and take an active role in safety meetings, investigations and reviews.

We provide resources to help our leaders understand what success looks like and how they can meet Vermilion's HSE expectations. This focuses on seven key areas:

- Our HSE Journey
- Human Behaviours
- Communication
- HSE Reporting and Investigations
- Hazard Recognition
- Risk Management, and
- New and Inexperienced Workers

## OPERATOR COMPETENCY

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We have developed a comprehensive HSE training matrix for all technical positions at Vermilion globally – from field operators to senior professional staff – that identifies the associated mandatory and recommended HSE training requirements. Operator competency supports hazard identification and mitigates our exposure to a potential HSE event by ensuring that staff are properly trained to safely execute their daily tasks. A clear view of employees' competencies and training increases Vermilion's confidence that job functions are being performed safely and consistently within regulatory and Vermilion-specific policies, practices and guidelines.

We have advanced our Operator Competency Programs (OCP) in Canada, France, The Netherlands and Australia. These projects have included knowledge identification, task inventory and procedures, SOP development and levels of assessment.

Ultimately, this work is intended to help us fulfill our HSE vision of a healthy workplace free of incidents, but will also support more effective workforce planning, and increase employee satisfaction and productivity.



# Safety Dashboard

## 3.6 Halve the number of global deaths and injuries from road traffic accidents

Vermilion has identified transportation, including driving, as one of our top fatal risks, and included it in our risk management priorities.



## 8.8 Protect labour rights and promote safe and secure working environments for all workers

Safety of workers and communities is Vermilion's highest priority; we focus on continuous improvement to our HSE Management System to support this, and report robust Occupational Health & Safety KPIs in our Performance Metrics annually.



## 12.2 Achieve the sustainable management and efficient use of natural resources

Avoiding or mitigating the environmental, health and safety-related impact of our production processes is integral to Vermilion's approach to responsible and safe operations.



## Commitments and Progress

2016	2017	2018
Implement Fair Culture policy in Central & Eastern Europe business unit  100% achieved	Develop Individual Safety Awareness Initiative for global rollout  100% achieved	Implement Personal Safety Awareness Initiative globally

Develop and Implement fit-for purpose Process Hazard Analysis Standard globally  100% achieved	Application of Standard across organization  100% Achieved	Rollout and Implementation of comprehensive Process Safety Management System across organization
Develop new safety operating procedures as part of operator competency program (OCP) in Canada  100% achieved	Ongoing development and implementation of OCP in Canada and France; review and update in The Netherlands; development and implementation of online training modules in Australia  100% achieved	Ongoing development and implementation of OCP in Canada and France; review and update in The Netherlands; ongoing review and updates to Australian online training
Develop in-house HSE Leadership Program  100% achieved	Deliver HSE leadership training to Canada office and field supervisors, CBU front line operators, CEE & US functional leaders  100% achieved	Further develop training program and train new leaders
Our motor vehicle incidents decreased from 37 globally in 2013 to 20 in 2016	Further development of Journey Management SOPs in France and The Netherlands	

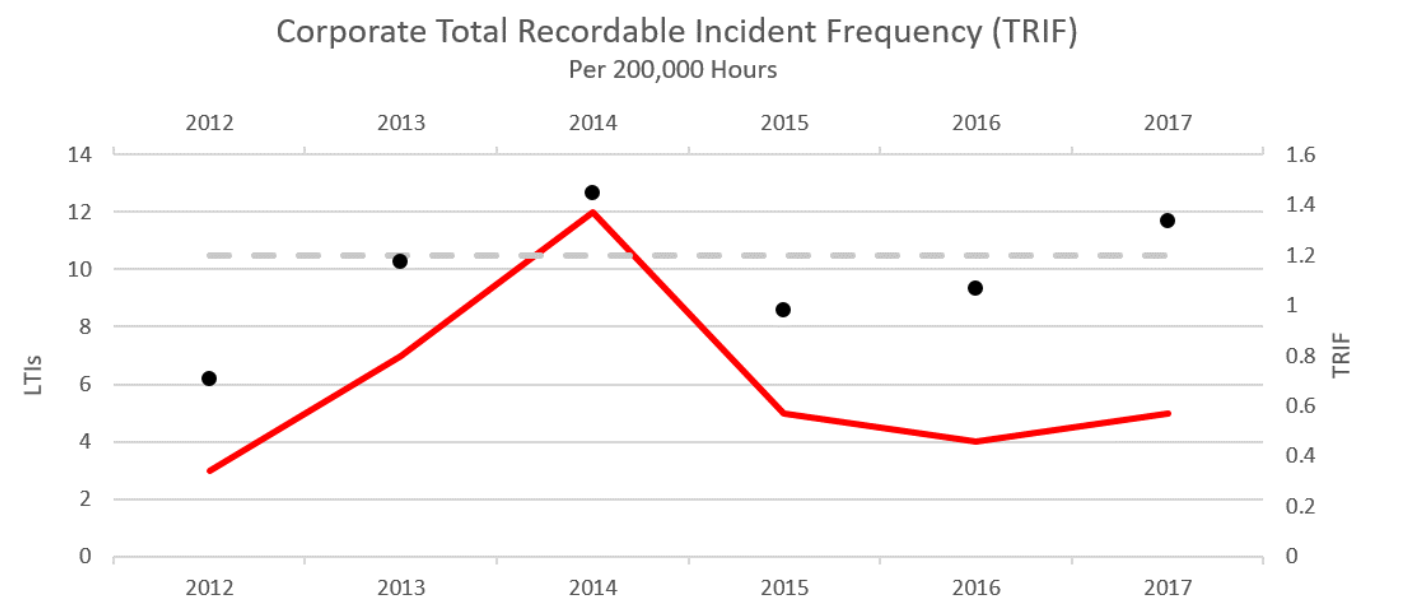
## HSE Performance Measurement

Vermilion uses a variety of HSE performance measurements that provide timely information on the progress and current status of the strategies, processes and activities we use to manage risk and safety. We focus on developing meaningful leading indicators that tell us how effective we are at identifying and reducing hazards in the workplace. These indicators also measure development activities, influencing safety performance and continuous improvement. <sup>403-1</sup>

We recognize that to adequately assess HSE performance, we need to take a balanced approach by measuring outcomes such as recordable injuries. However, such lagging indicators are reactive in nature, can be a poor gauge of prevention and sometimes may lead to falsely interpreting low injury rates as an absence of risks in the workplace. Because of the drawback associated with this type of metric, we prefer to concentrate our energy on more proactive measures of performance.

Total Recordable Injury Frequency, or TRIF, is a standardized calculation commonly used to report recordable injuries per 200,000 hours worked. As with any other lagging indicator, it is a measure of yesterday's safety performance, once hazardous energy has found its way through controls and inflicted harm.

Total Recordable Injury Frequency (TRIF) and Lost Time Incidents (LTIs)



TRIF and LTI are shown from 2011 to 2017. As part of our overall safety management processes, we fully investigate all incidents and near misses, and implement corrective actions. We also communicate lessons learned across our business units to continuously improve our performance.

# Our Approach to Safety

At Vermilion, we are committed to our vision of HSE. Everywhere. Everyday. Everyone. We are focused on ensuring everyone who comes to our locations returns home safely every day.

In addition to our overall HSE approach, we have established management tools and processes that are specific to the protection of the health and safety of our workers and our communities.

## PUBLIC SAFETY & EMERGENCY RESPONSE

We understand and accept the high expectations placed on us by our stakeholders to ensure Vermilion recognizes, considers and mitigates potential safety impacts on the residents in the communities in which we operate. Ensuring public safety has been, and will continue to be, our number one priority. This is our license to operate.<sup>413-2</sup>

WE REGULARLY CARRY OUT EMERGENCY RESPONSE EXERCISES TO TEST OFFICE AND FIELD STAFF RESPONSE TO EMERGENCY SCENARIOS.

Vermilion's organization and response to emergencies follows the globally accepted Incident Command System (ICS). The ICS design structure is applicable to all kinds of emergencies and is suitable for both small and day-to-day situations as well as very large and complex incidents. It is applied consistently with local emergency responders and across each operating area, and provides a common organization structure to aid the management of resources at emergency incidents. Exercises are organized throughout the year to train our people and test the effectiveness of our emergency response plan (ERP) under various scenarios. We also evaluate the effectiveness of every exercise and ERP that is conducted.

ERP exercises include table top exercises, simulations, and combined exercises with Corporate Headquarters:

Level 1 ERP	Level 2 ERP	Level 3 ERP	Level 4 ERP
Table top exercise – Includes discussion of various emergency scenarios, cross training of ICS roles and responsibilities.	In-Country Operations-only Simulation – Includes the mobilization of business unit staff, first level of scenario role playing.	Simulation includes Vermilion's Corporate Command Team Activation. Corporate Command owns corrective action logs and improvement schedule. Role playing of all Vermilion personnel involved.	Simulation includes Vermilion's Corporate Command Team Activation and external parties (other industry, emergency responders, government authorities, other external stakeholders).



## TOP FATAL RISKS

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We have worked extensively with our international operations to analyze a comprehensive data set and identify our Top Fatal Risks. Together, we selected risks that were common across our operations for a more detailed review, assessed related hazards, and developed comprehensive plans specific to each business unit to eliminate or prevent those hazards from occurring, or identify the barriers and controls required to help prevent an event from happening. We have implemented changes to our systems to help ensure the organization is focused on preventing these critical risks.

### We identified our top fatal risks at Vermilion as:

- Transportation
- Energy Isolation (electrical / mechanical, etc.)
- Crushed / caught between
- Struck by
- Process hydrocarbon release
- Working at / Fall from heights
- Structural Failure

We build on our people's experience, demonstrating the effective collaboration of our operations and management groups. Hazard identification and risk management programs have been put in place that align with the efforts we've directed towards competence and training programs in our operations. In addition, Vermilion maintains leading HSE KPIs, which our staff can access on our corporate intranet, to follow Vermilion's progress on hazard awareness and risk as part of our corporate scorecard. The leading KPIs are monitored as an indicator of the health of Vermilion's integrated HSE MS.



## HSE Perception Survey

Each of our employees and contractors plays a critical role in our HSE performance, and in establishing and maintaining a safety-oriented workplace. We therefore conduct HSE Perception Surveys every three to four years, confidentially surveying our staff to learn about their perceptions of 10 overarching safety climate factors:

- Management Commitment
- Team Functioning
- Morale
- Supervisor Commitment
- Incident Outcomes
- Personal Responsibility for Safety
- Competency
- Organizational Commitment
- Fair Culture
- Safety Procedures

The survey:

- Provides a snapshot of staff perceptions about how safety is being managed
- Tracks the health of our Safety Culture across Vermilion over time
- Encourages employees and contractors to participate in and contribute to safety programs and initiatives
- Communicates throughout Vermilion our key strengths and areas for improvement, and
- Feeds into the HSE Plan and focuses the organization on critical items, ensuring a practical program.

To date, we have conducted surveys in 2013 and 2016, with this schedule providing the timeframe required to clearly understand the outcomes, and effectively plan and implement the actions required to respond to or address the findings.

Both surveys received a staff response rate of over 90%, creating a solid baseline measure of staff perceptions of how they feel safety is being managed at Vermilion.

All factors received favourable scores in both surveys (above 3.5/5), with particular strengths in personal responsibility for safety, and the commitment to safety at the management, organization and supervisor levels. Staff identified opportunities for improvement as well, and we continue to mine the data and work to better understand the results and use those learnings to identify focus areas.

The 2013 survey resulted in the implementation of our **Fair Culture** policy in Canada in 2014, and subsequent rollouts in our other business units, in response to feedback that Vermilion's incident investigation and resolution process was not sufficiently clear.

Other examples of actions taken as a result of the HSE Perceptions Survey feedback include advancement of our Competency Programs, updates to our Event Management Practice (EMP) and enhancement of our Event Management Information System (EMIS).

The 2016 survey highlighted training and competency programs, along with communications, as areas where we could improve, including making HSE documents and procedures easier to find, and improving our incident management software. We have focused on these areas throughout 2017.



## Feature: Safety in The Netherlands

We assess and customize safety requirements according to the unique character of each of our business units. In The Netherlands, for example, we carefully monitor both earthquake and subsidence risks.

### Earthquake Risk Assessments

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No production-related seismic activity has ever been recorded on the fields that we operate in The Netherlands, some of which have been in production for over forty years. Nevertheless, we incorporate into our development and production plans the latest independent scientific research and modeling with respect to the probability and potential magnitude of seismicity occurring in relation to our operations. We are cooperating with all levels of government, research institutes and local communities to improve the industry's understanding and communication on this complex topic.

### Subsidence Risk Assessments

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As part of the production plan approval process, we conduct extensive baseline subsidence measurement surveys and construct detailed subsidence models to estimate the total lifetime subsidence as a result of gas production activities. Once production has commenced, we conduct regular subsidence measurements to ensure gas extraction-related subsidence stays within our modeled expectations. In the event that actual measured subsidence exceeds predictions in a given gas pool, we will conduct more detailed studies and measurement work to determine the appropriate production approach for the remainder of the gas pool life.

While we endeavor to reduce or eliminate impacts to the communities we operate in, if we have caused damages we will ensure they are compensated and corrected. In 2014, Vermilion contributed 3.6 million Euros to a compensation fund related to the Harlingen Upper Cretaceous field in the Province of Friesland. We voluntarily shut in this field in 2008, after we had taken over operatorship in 2004, due to higher than expected levels of subsidence. This field has remained shut in since that time.

Additional information about [licensing and permitting in The Netherlands](#) can be found on our Netherlands website.





## Feature: Safety Case Revision in Australia

Like all facilities operating in Australian federal waters, Vermilion's Wandoo Facilities are required to have a Safety Case and Environment Plan that are assessed and accepted by the Regulator, NOPSEMA. The Safety Case and Environment Plan are objective- and evidence-based assessments requiring the Regulator to be satisfied that:

- The identified hazards and potential impacts are suitable for the Wandoo Facilities
- Hazards are assessed and managed to as low as reasonably practical, and
- A management system is in place to support and monitor implementation of hazard controls on a continual basis.



The Safety Case and Environment Plan require review and resubmission at a minimum frequency of five years.

The Safety Case is focused on the prevention of major accident events. Vermilion is required to identify, assess and manage major accident events through a series of formal safety assessments, including flammable hazards analysis, explosion risk assessment, and Escape, Temporary Refuge, Evacuation and Recovery Analysis. Throughout 2015 and 2016, Vermilion undertook a review and update of the full suite of the Wandoo Formal Safety Assessments, the outcomes of which were accepted by the Regulator in the 2017 submission.

The Environment Plan addresses the environmental impact from operations, well construction and oil spill response. We undertook a comprehensive environmental risk and impact assessment for all our activities within the Wandoo Field, and submitted our new Plan in 2016. In addition, we maintain a comprehensive spill response plan, which is aligned to our spill hazards and operating environment, and we review and test its capability requirements annually. NOPSEMA accepted our Operations and Well Construction Environment Plans in 2017 and 2014 respectively.

Both the Safety Case and Environment Plan require engagement with relevant stakeholders. The Safety Case process regularly engages the workforce throughout the assessment processes. The Environment Plan requires consultation with stakeholders that may be directly impacted from our day to day activities. As part of our commitment to stakeholders, Vermilion provides a summary of the environment plan, including contact information, on our website.

The Regulator conducts regular inspections to confirm compliance. Four inspections were conducted in 2017, with no enforcement action required.



## Feature: Wandoo Life Extension

Given the significant capital expense and potential environmental impact involved in new offshore platform development, it makes sense to operate and maintain existing infrastructure safely and responsibly for as long as possible. Vermilion's expertise in this area is aiding our Wandoo Life Extension project, which is in process to verify that the design and physical integrity of the Wandoo field facilities in our Australia operations are suitable for production beyond the original design life. This will ensure that we remain compliant with local legislation and regulations, and continue to operate safely.

The original design life for the Wandoo A (WNA) unstaffed platform facility was 15 years from installation (October 1993). The WNA design life has twice been validated and extended for 5 years each, in 2008 and 2013. The structure is currently undergoing design verification to extend the design life again by 5 years to October 2023.

The original design life for the Wandoo B (WNB) staffed facility and export system was 20 years from the time of installation (March 1997). The WNB platform structure, all Wandoo topside facilities and the export system are currently undergoing design verification to extend their design lives by 20 years to March 2037.



### Life Extension Process Overview

- Vermilion undertakes extensive site surveys of the existing facilities to determine their current condition, identify areas for maintenance and repair, and verify their condition for ongoing use, including super/subsea structures, subsea system, marine system, safety systems, wells, topsides and the Wandoo A platform.
- Vermilion develops a Basis of Analysis that presents the criteria to be used to reassess the platforms, flowlines and CALM Buoy; the design and operating facilities are assessed against current codes and standards using updated knowledge and data.
- The latest meteorologic ocean data (wave, wind and current) and seismic loads are developed by subject matter experts.

- The platform, CALM Buoy and flowlines are then reassessed and the results compared to the latest codes and standards.
- If the reassessment is supported by the Independent Verifying Body (IVB), Vermilion is issued with a Verification Certificate allowing us to operate the facility for the agreed future period.
  - Vermilion has selected Lloyds Register as the IVB, a recognized expert that meets our independence and competency requirements, to review the analysis and systems.

## Project Progress

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- The original design life for the subsea flowlines was 20 years from the time of installation (October 1996). The flowlines and export system design have received IVB verification, extending their design lives by 10 years to October 2026. This 10-year life extension, based on the flexible flowline's in-place strength, on-bottom stability and material limits, is an Australian industry first.



# Environment Dashboard

## 6.1 Ensure the availability and sustainable management of water for all

We focus on water stewardship, both in our marine environments (6.6) and from a conservation perspective (6.4). We report on water metrics (6.3), and we participate in multi-stakeholder partnerships (6.1 & 17.17)



## 7.2 Increase the share of renewable energy in the global mix

## 7.3 Reduce energy consumption

Vermilion is developing expertise in geothermal energy projects while also focusing on reducing energy consumption through infrastructure renewal in all of our business units.



## 12.1 Ensure sustainable production patterns

## 12.2 Achieve the sustainable management and efficient use of natural resources

## 12.6 Encourage companies to adopt sustainable practices and integrate sustainability information into their reporting cycle



We are incorporating sustainable development into our business strategy (12.1), striving for increased energy efficiency (12.2) and expanding our sustainability reporting (12.6)

### 13.1 Combat climate change

We are proactively identifying risks and opportunities, reporting on emissions and other key data, setting internal carbon prices, and working on target setting.



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### 14.1 Conserve and sustainably use the oceans for sustainable development

#### 14.2 Sustainably manage marine and coastal ecosystems

We comply with or exceed regulations regarding wastewater and marine environment management, proactively improving western Australia's capacity for oiled wildlife recovery.



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### SDG 15.1 Protect, restore and promote sustainable use of terrestrial ecosystems

#### 15.5 Take urgent action to reduce or halt biodiversity loss

Vermilion has environmental impact assessment procedures that comply with or exceed all regulations in our business units, and we proactively work to ensure our operations protect local biodiversity



## 2017-2018 Updates

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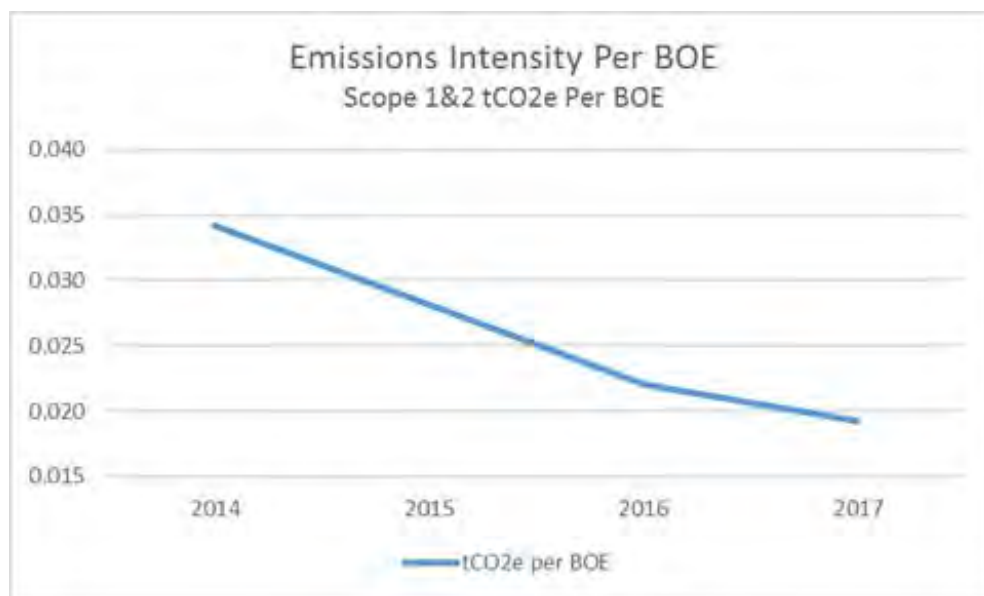
### Strong CDP Results

Vermilion's performance in the annual CDP scoring, which consistently places us far above our peer group, demonstrates the focus we have placed on understanding and managing the impact our operations and projects have on climate change. This is a significant achievement for a company of our size, and reflects the efforts from our HSE and Operations teams worldwide to increase energy efficiency and decrease greenhouse gas emissions, and to develop and implement renewable energy projects that support a circular economy.

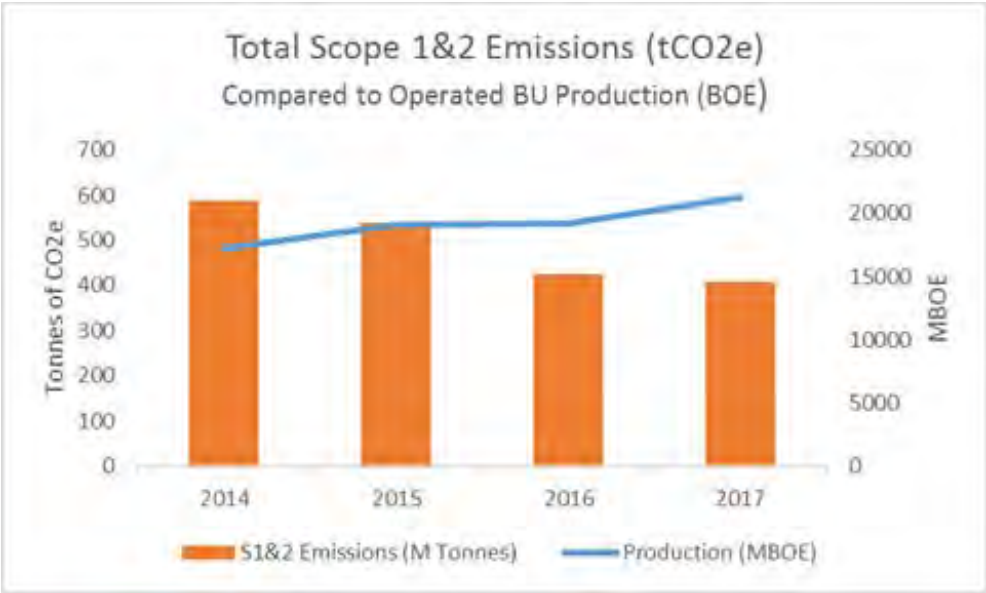
- In 2018, Vermilion was recognized with a Leadership Level rating of A-. We are the top-rated Canadian oil and gas sector company, and are in the top 2% of oil and gas sector companies in North America and 5% globally.
- In 2017, Vermilion was recognized with a Leadership Level rating of A-. We are the only Canadian Energy Sector company, and one of two in North America and 13 globally to achieve a Leadership Level score this year (Top 3%)
- In 2016, Vermilion achieved the highest ranking possible, being named to the "A list" level. We were one of 193 companies globally, one of only five energy companies in the world, and the only North American company to make the list.
- In 2015, Vermilion was the leading energy company on the Canadian Climate Disclosure Leadership Index (CLDI) and the first Canadian energy company to achieve the top score of 100.

## Decreasing Emissions Intensity

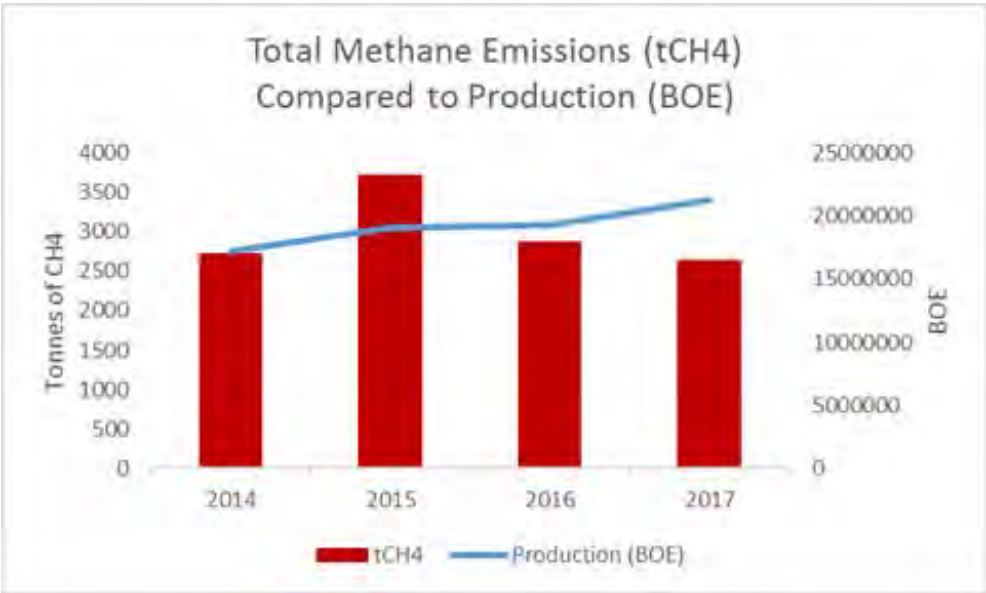
We use both absolute and intensity metrics to assess our performance (see [Performance Metrics](#)). Our emissions intensity provides an important benchmark, as it confirms that even as we increase production, we are decreasing the greenhouse gas emissions of each barrel of oil equivalent that we produce.







\*Operated business unit production within our GHG reporting scope



Meeting Our Targets

To date, we have focused on testing our ability to meet absolute targets based on our performance via operational activities. The following targets have been critical in this process, and have contributed to our strong CDP performance.



Category	Target	Progress
Scope 1 – flaring and venting	Set in 2014: Reduce flaring emissions at our light-oil assets in southeast Saskatchewan acquired in 2014 by 50% by 2020	Above Target: Achieved 75% reduction in annual emissions (from 193,999 tCO <sub>2</sub> e in 2014 to 47,640 tCO <sub>2</sub> e in 2016)
Scope 1 – flaring and venting	Set in 2014: Reduce flaring emissions at one of our major facilities in France by 65% by 2015	On Target: Achieved 65% reduction in emissions (avoiding the flaring of 14,500 tCO <sub>2</sub> e annually) by implementing a gas export system
Scope 2 - renewable energy	Set in 2015: Exceed 5% of our total power consumption coming from renewable sources (and replacing traditionally generated electricity) by 2017	Above Target: Reduced Scope 2 emissions in The Netherlands from 41% of our 2015 gross Scope 2 emissions to 2% of our 2016 gross Scope 2 emissions through the purchase of 100% green power beginning on January 1, 2016, from our largest power provider in our Netherlands Business Unit. This represents an estimated 39,145 tCO <sub>2</sub> e avoided annually based on 2015 emission intensity levels for purchased energy and 2016 energy consumption.
Renewable Heat Energy Target	Set in 2015: Generate 31,380MWh of renewable geothermal energy annually in our France Business Unit from our Parentis battery's tomato greenhouse project until at least 2035	Above Target: 2017 production was 70,080 MWh of geothermal energy
Renewable Heat Energy Target	Set in 2016: Begin generating renewable geothermal energy annually in France from our La Teste ecohousing site in 2017	Progressing toward Target: ecohousing geothermal heat technology installed, first 150 housing units in place November 2016
Emissions Intensity	Set in 2016: Top quartile emissions intensity (lowest emission rate on a per BOE basis) when compared against our peer group annually	On Target: Vermilion's emissions reduction initiatives and activities have resulted in top quartile performance in our peer group.

# Our Approach to Environmental Stewardship

## MATERIALITY: PROTECTING WHAT'S IMPORTANT

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We seek to operate our business in the most environmentally responsible manner possible.

The diversity and beauty of the environments in which we operate and live are daily reminders of the value of protecting the environment. To do so, we not only operate in compliance with all environmental regulations across all business units, but strive to lead the development of industry best practice standards in our operations worldwide in order to fulfill our commitment of pursuing Best-in-Class HSE and Integrated Sustainability.

Our commitment to pursuing Best-in-Class HSE is also a commitment to pursuing continuous improvement in all that we do. In addition to continuing to build processes to meaningfully track and understand our sustainability impacts, we are committed, wherever possible, to use processes that will reduce our environmental impact.

Our approach to environmental stewardship emphasizes four main areas for continuous improvement:

- Improving energy efficiency
- Reducing greenhouse gas emissions
- Increasing our water efficiency
- Caring for the land, including protecting biodiversity

## MANAGEMENT

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In addition to our overall **HSE Management System** and our **Risk Management** process, we have established additional management tools and processes that are specific to environmental stewardship. 304-1 304-2 413-1

**Environmental Impact Assessments:** We conduct Environmental Impact Assessments and implement management plans as required by regulations in all of our business units, and wherever needed based on conditions in our operating locations. This includes, but is not limited to, the following examples:

- **Canada:** We use references such as Landscape Analysis Tool maps to identify areas that may require special care by our operators. One of our central Alberta locations touches on an area referenced as a Key Wildlife and Biodiversity Zone, particularly for ungulates such as deer, elk and moose. During the critical winter periods, when food sources are lower quality and less accessible due to cold temperatures and

deep snow, these animals survive by, in part, minimizing their energy expenditures through reducing their movements in their winter ranges. It is therefore important for us to minimize any disturbance to them during these critical periods. We therefore cease operations, including drilling, in this location between January 15 and April 30.

- **France:** In addition to completing EIAs, we collaborate with external consultants and experts to ensure that our activities support scientific research whenever possible. This resulted in an entirely new species of marine worm being identified in the waters off the coast of France. Vermilion's role in providing both data and material were noted in a scientific paper that identified the worm, named *Auchenoplax worsfoldi*, which has now been added to the World Register of Marine Species.
- **The Netherlands:** EIAs are part of the permitting process, and are carried out prior to an environment permit being granted for exploratory drilling and for production. In addition, we work closely with environmental experts to guide us in our activities to ensure that we do not disrupt or disturb wildlife migration, feeding or breeding patterns. In some cases, this means that we delay or reroute our development activities. This includes our Diever-02 well site, where we delay pipeline construction and other activities annually to ensure we do not interfere with birds nesting in the area.
- **Germany:** Vermilion is evaluating the exploration opportunities available on our land base. As we complete these assessments, we will present exploration activity plans to partners and authorities as well as public and community stakeholders. These plans will reflect our efforts to minimize the environmental and social impact of our activities. As environmental impact assessments are a critical element of the acceptance and permitting process, Vermilion will ensure that they are conducted in the most rigorous manner feasible.
- **Australia:** We have developed a detailed environmental impact assessment of the marine environment around our operations on the northwest shelf of Australia's west coast, including our direct permit area and a wider surrounding area, where either planned or unplanned events may create impacts. In addition to analyzing the biodiversity of the area, current and traditional uses, and areas of significant environmental value and cultural heritage, we have conducted a risk assessment workshop that considers the regional environment and the local marine ecosystem. The resulting environmental plan ensures that our systems, practices and procedures meet the plan's defined performance outcomes and standards and all relevant legislative requirements. The commitments associated with these outcomes and standards contribute to ensuring that the residual environmental risk associated with our operations is as low as possible. We have also developed a range of performance standards (controls) that will be implemented throughout the life of the Wandoo field to ensure the potential environmental impacts identified through the risk assessment are managed appropriately. In July 2017, the latest revision to the Wandoo Facility Environment Plan (which can be found [here](#)) was accepted by NOPSEMA, the regulator. The revision, which is valid for 5 years, includes the following:
  - Improvements related to produced water management
  - Water treatment upgrades, and
  - Improvements in oil spill response planning and capability
- **United States:** We conduct comprehensive EIAs in our US locations that include cultural and paleontological surveys prior to any ground disturbance. We are vigilant during construction, and committed to having paleontologists and other scientific experts on hand to ensure we not only meet all regulations, but also take care of fossils or other important items. In 2015, that's how we found a triceratops skull as crews started to build out one of our well pads. The skull was moved to the Denver Museum of Nature and Science.

**Project Development and Management:** We have altered our project management framework to include aspects of sustainability and climate change – including regulatory change, water use, emissions reduction and footprint reduction to reduce ecosystem fragmentation. We begin by ensuring compliance with regulatory requirements & standards, and alignment with Vermilion's economic assessment criteria at the investigation phase of the project. Other project development factors include:

- **Employee Engagement:** Suggestions from staff via town halls and HSE district meetings. Staff feedback is taken into account by the groups responsible for management of emissions quantification and sustainability initiatives.
- **Financial optimization calculations:** Emissions reductions and other environmental stewardship impacts are driven by the optimization activities we undertake in our business units and identified at the project assessment stage for both new and existing construction. Added value and responsible, sustainable development of the resources in our operating regions are primary investment drivers. The activities are typically identified by the in-country technical teams.
- **Multiple benefits potential:** Many initiatives that support Vermilion's operational excellence and stewardship also have the effect of reducing emissions and other environmental impacts, and improving environmental benefits associated with our activities through the reduction of fuel, energy or water, or the protection of land and biodiversity. These benefits are identified during the investigation phase of a project assessment.

Our technical teams across the organization communicate with each other, collaborate on current and upcoming sustainability initiatives, and bring in technical expertise to augment project execution.



# Measurement & Evaluation

## MEASUREMENT, EVALUATION AND ADJUSTMENT

**Internal Approach:** We proactively focus on achieving Best-in-Class performance in environmental stewardship. We assess this based on a robust framework of measurement, reporting and adjustment, including the following actions:

- We have established a comprehensive climate and environmental risk matrix analysis
- We have implemented key performance indicators on environmental stewardship that we monitor monthly and report on annually
- We continually examine technology and processes, conducting operational and engineering reviews aimed at increasing efficiency, and reducing the emissions and monetary expenditure requirements at major facilities
- We analyze anticipated and actual legislative and regulatory changes and their potential impacts
- We have completed a GHG Quantification Methodologies study, and
- We updated our Carbon Liability Analysis in 2017.

**External Approach – Regulatory and Reporting Framework:** The following table illustrates the significant reporting and regulatory bodies under which we operate:

Business Unit	Reporting Body	Reporting and Action Activities
All Business Units	CDP	We initiated reporting under CDP in 2014, beginning with a base year of 2012.
All Business Units	Montreal Protocol	We have phased out Freon-22 in our C3 cooling plants in Netherlands to reduce the risk that this substance could be released.
Canada	Specific Gas Emitter Regulation	Reduction requirements do not apply, as Vermilion is below the threshold of 100,000 tonnes of CO <sub>2</sub> e annually; our current and projected CO <sub>2</sub> e reductions indicate that even with a 50% reduction in this threshold, we would still be below it. Although Vermilion meets our regulatory requirements, we maintain a detailed initiative database to identify and implement CO <sub>2</sub> reduction projects where practical.
Canada	Greenhouse Gas Reporting and National Pollutant Release Inventory reporting under the Canadian Environmental Protection Act	Reduction requirements for Greenhouse Gas Reporting do not apply, as Vermilion is below the threshold of 50,000 tonnes of CO <sub>2</sub> e annually; our current and projected CO <sub>2</sub> e reductions indicate that even with a 20% reduction in this threshold, we would still be below it. We report under the National Pollutant Release Inventory (NPRI) requirements.

<b>Canada</b>	Alberta's Directive 039 (2013)	A regulatory change in Directive 039 led us to plan and begin the implementation of additional elements in our facility engineering and maintenance program to reduce benzene emissions associated with glycol dehydrators.
<b>France</b>	Register and the Annual Reporting of Emissions and Transfers of Pollutants and Waste	We report operations water, waste and greenhouse gas (GHG) information annually.
<b>Netherlands</b>	Netherlands Long-term Agreements with Industry (MJA3)	We report operations energy efficiency and emissions information annually.
<b>Australia</b>	National Greenhouse and Energy Reporting Act (2007)	We report under the robust emissions accounting required by this Act, and have examined three potential carbon taxation pricing scenarios and budgeted the costs associated with compliance.



# Approach to Climate-Related Issues

## Climate Policy and Business Strategy

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We recognize the importance of creating and implementing climate policy. We believe that our approach goes well beyond climate and, in fact, speaks to our business strategy, balancing the needs of the planet as expressed in the 2015 Paris Agreement, with a strong focus on shareholder return. These are not mutually exclusive. In fact, our success as a business provides us with the ability to innovate in ways that will continue to reduce our impact on the environment.

At Vermilion, we have always been committed to the priorities of health and safety, environmental stewardship, and economic prosperity – in that order. Our management of climate-related issues – both risks and opportunities – follows that approach, in which we focus on best-in-class performance, founded on our sustainability leadership within the oil and gas industry and our core values of Excellence, Trust, Respect and Responsibility. (For more information about our governance of climate-related risks, please see our [Leadership](#) section.)

We are deeply embedded in the low-carbon transition, guided by global initiatives that include The Paris Agreement and the United Nations Global Goals for Sustainable Development. We are actively engaged in this critical work, with a focus on supporting a stable and managed energy supply that meets the energy needs of our global customers and communities, while also ensuring financial and organizational sustainability. The low carbon transition requires collaboration from all parts of the energy value chain, from producers through governments, industry, communities and consumers. As a responsible exploration and production company, Vermilion is looking forward to continuing our collective efforts on climate-related initiatives while also considering the wider issues of environmental and social responsibility.

Our strategy focuses on the following key elements:

1. **Lower carbon fuels.** Since 2012, we have shifted our production mix towards natural gas, as a cleaner burning fuel than other fossil fuels, and we continue to focus on reducing the carbon intensity of the oil and gas that we produce. This includes producing fuel that is used within the country of production wherever possible, contributing to a reduced carbon footprint associated with transportation of the fuel to consumers, and to increased national energy security.
2. **Greater energy efficiency.** Many energy- and operational-efficiency initiatives go hand-in-hand, which in turn helps us to minimize our carbon footprint and reduce greenhouse gas emissions.  
302-1 302-3 302-4
3. **Lower greenhouse gas emission intensity.** We are committed to reducing the greenhouse gas emissions associated with our production, with particular focus on methane.

4. **Socially responsible fuels.** We operate in regions noted for their stable, well-developed fiscal and regulatory policies related to oil and gas exploration and development, and for their robust framework of health, safety, environmental and human rights legislation. We are committed to ensuring that our fuels are produced in the most environmentally and socially responsible manner possible, respecting worker rights and community engagement.
5. **Renewable Energy.** We are continuing to pilot the production of renewable energy, including geothermal energy, for which our internal expertise in geophysics and drilling is particularly well suited. This work has begun with a focus on the geothermal potential of our produced water, which supports a circular economy model, and is expanding into other areas, including biogas and the conversion of traditional oil and gas assets to geothermal production.
6. **Transparency and Reporting.** We have established a strong record of reporting on greenhouse gas emissions, energy usage and other key environmental metrics. This data is helping us to understand our opportunities for improvement, and we will continue to use it to determine emissions and energy reduction targets.

## How We Manage Climate-Related Initiatives

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We have been working to analyze science-based target setting in relation to our operations in critical areas identified by both internal and external stakeholders, including energy use, greenhouse gas emissions and water use. One issue is that a decarbonization pathway for the oil and gas sector has not yet been published by the Science-Based Targets initiative, so we are undertaking our own research into this area. Understanding that organizations often progress along a continuum of action, we have achieved the following milestones:

- **Understanding our current situation:** our sustainability reporting since 2012/2013 highlights the increasingly sophisticated and streamlined data collection process we are using internally, and continues to provide a platform from which to assess current levels, trending and comparisons to industry peers.
- **Setting an internal carbon price:** We have established location-dependent **carbon pricing** schemes for Scope 1/2 emissions as part of our risk management process, looking at the three most likely scenarios to impact our business in the next 5 years (low, anticipated and high carbon pricing). Our rationale is to determine the extent of the potential impact of carbon costs to Vermilion's financial performance and competitiveness, and where the risk exceeds thresholds, plan and implement mitigation measures. We review carbon pricing at the corporate level based on in-country results.
- **Engaging in scenario analysis** based on a 2°C warming limit, and the impacts related to it, including:
  - Physical: temperature changes impacting our global locations, increasing severity of storms, rising sea levels, etc.
  - Regulatory: carbon pricing, carbon sequestration programs, oil and gas exploration and production limits, etc.
  - Changing consumer behaviour and technology: electric vehicles, replacement of coal by natural gas for electricity generation, etc.



- **Increasing low carbon products:** Between 2012 and 2017, we moved from a 67% weighting of oil compared to natural gas to 45%. We recognize that our natural gas – which provides the market with a power generation alternative that achieves approximately 80% energy efficiency and up to 50% cleaner burning than coal-fired electricity – is an important part of the transition to lower carbon energy. For example, if the natural gas produced by Vermilion on an annual basis in Canada were used for power generation as opposed to coal-fired power, the consumer would be able to avoid 2,839 ktonnes of CO<sub>2</sub>e. We continue to explore additional projects in this area, including using flared gas to produce electricity at our facilities to offset our power consumption.
- **Comparing our performance to industry benchmarks:** Our emissions reduction initiatives have resulted in Vermilion having a top quartile emissions intensity (emission rate per BOE produced) when compared against our peer group. This is a significant achievement, given that we do not have the benefit of a concentrated asset (as many of our peers have), which would support lower operational emissions. We therefore rely more heavily on innovation to reduce emissions.
- **Anticipating changes in regulatory requirements:**
  - Update to Directive 039 in Alberta. This regulatory change led Vermilion to complete engineering reviews and facility updates that we estimate to total \$1MM by the end of implementation in 2018. This will result in Criteria Air Contaminants reductions beyond regulatory requirements, and is a good example of how we are staying ahead of changing regulations.
  - Participating in the MJA3 (Term Agreements on Energy Efficiency) programs in The Netherlands since 2005, with the result that our operations are 76% more energy efficient than our base year.

**New Facility Construction:** We employ new and efficient technology that adapts to changing requirements and has the potential to decrease our environmental impact. This includes:

- **Canada Business Unit:** In 2014 and subsequent years at a number of our new wells, we installed solar power as a primary power source, augmented with thermoelectric generation (TEG) for when the region lacks the necessary daylight to produce the energy required (seasonal augmentation)
- **Corporate Headquarters:** Our Calgary headquarters is located in a LEED Platinum office building, with our offices certified LEED Gold, including low-flow appliances and plumbing fixtures, Energy Star-certified computers and appliances, recycled content in furniture and carpet, and active participation in the building's Zero Waste program.
- **France:** Vermilion constructed our Parentis offices to comply with the French Thermal Regulation RT2005, which is focused on reducing the greenhouse gas load by limiting the energy consumption of buildings.

#### Retrofit of Existing Construction:

- **Ambes, France:** In 2017, we replaced traditional 300W lighting systems in our crude oil storage facility with 98W LED bulbs. This provided better lighting, an increased life cycle from 6,000 to 60,000 hours, and a decrease in energy consumption of 6,000 kWh, or 66%. G4-EC2



## Approach to Methane Emissions Reduction

As one of the highest-impact greenhouse gases, methane is an important element in Vermilion's focus on climate-related risks and opportunities, particularly in reducing our greenhouse gas emissions from natural gas production. The economic viability of methane leakage prevention is an important element, with two factors influencing continuing developments: significant advancements in technology – fostered by government commitments surrounding climate change – and the cost of carbon. Combined, these will act to reduce the financial expenditure associated with methane leak detection and the updating of older infrastructure that is prone to sources of methane.

Measures being examined by governments in the regions where Vermilion operates have the potential for a significant impact on the marginal abatement cost curves associated with carbon reduction projects that Vermilion has looked at in the past, as well as future projects. The impact of these cost of carbon measures will result in increasing the economic viability of methane (and CO<sub>2</sub>e) reduction projects. Understanding that this is a developing area, we have teams in each business unit who are responsible to monitor regulatory development and share learnings with other business unit teams, as well as corporate groups. We continue to proactively look at our operations to determine areas where we can prevent methane releases and have a positive impact on our Scope 1 emissions and our Integrated Sustainability business pillar. We believe that we have positioned ourselves proactively and have therefore mitigated the financial impacts of regulatory-driven methane reduction programs.

### SOURCES AND DETECTION

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Similar to any upstream oil and gas operation, the majority of methane emissions from Vermilion's operations stem from venting, flared emissions (understanding that flaring typically achieves 98% combustion efficiency), storage emissions and process/instrumentation emissions.

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: We currently perform limited LDAR that is targeted (for example, identifying leaks during a turnaround) as opposed to a gross percentage of our assets on an annual basis. In addition to a targeted LDAR program, we currently perform LDAR dominated by Operations identification (qualitative). The scope of this work covers over 90% of our assets in Canada on an annual basis, with over 340,000 site visits per year (estimated). Targeted identification such as identification of leaks during facilities work is also built into all turnaround activities within the CBU. This program is under review by the facilities group prior to LDAR regulations coming into place federally and provincially.
- FBU: Quantitative LDAR programs vary annually. As this is an oil-dominated asset, the volume of natural gas and associated CH<sub>4</sub> emitted is low.
- NBU: Netherlands has a robust LDAR program, with 25% of the accessible flanges screened on an annual basis.

- **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 potential sources would be identified by our on-platform crew through visual inspections and auditory or olfactory detection. If a leak is identified, it is fixed.

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 emissions ratio of CH<sub>4</sub> to natural gas production is significantly lower than the EDF's recommendations, at 0.11% (on a V/V basis). When comparing CH<sub>4</sub> emitted to total hydrocarbon production (within our emissions reporting scope), Vermilion's ratio is 0.060% (compared on a BTU basis). This value is a result of our commitment to methane detection and reduction, and we continue to examine areas where we could further improve.

This demonstrates our commitment to methane detection and reduction, and we continue to examine areas where we could further improve.

## OPPORTUNITIES FOR CHANGE

In Canada, LDAR will be mandated federally and provincially by 2020. We believe our Canada Business Unit is therefore in scope for an expanded methane LDAR program, with implementation likely in 2018/2019. This will form the basis for a country-specific carbon emission inventory, which will enable us to identify the areas with the largest potential return on investment related to emission reductions per unit of expenditure.

The EDF report further recommended placing an economic value on emissions. While applying the realized cost per business unit as defined in the 2016 annual report would indicate a value of approximately \$400,000, we would caution that this does not adequately account for the quality of emissions and the current technical challenges in recovering the 2% of partially combusted flared gas. We will continue to assess the practicality of accurately measuring economic value in this regard.

Part of the Vermilion advantage is our track record of being an industry leader in quantification and disclosure of the carbon emissions associated with our operations. While some initiatives, and how we complete them, are not disclosed to support Vermilion's competitive advantage, we believe that this portion of the energy sector has benefitted and will continue to benefit greatly from open sharing of ideas.

One recent example is the additional focus that Vermilion has placed on **reducing our flaring in our southeast Saskatchewan assets**, through infrastructure construction and the conversion of a former waste stream into a product stream. In addition, we have successfully converted a flare in our Parentis, France location to a **highly effective incinerator**. We are continuing projects of this type, as they are proving successful in achieving overall emission reduction targets in these assets, and they have enabled Vermilion to significantly reduce our emissions intensity while increasing production.



## Feature: Energy and Emissions Reduction Projects

The following projects have long-term environmental benefits, including energy and/or emissions reductions. <sup>302-4 305-5</sup>

### Reducing Flaring and Venting in Southeast Saskatchewan

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In April 2014, we closed the purchase of a small private company with light-oil assets in Southeast Saskatchewan. Following the purchase of these assets, Vermilion has made important improvements that reflect our focus on Safety, Integrated Sustainability, and Operational Excellence, based on our target to reduce flaring from this operation by 50% by 2020. This resulted in a significant focus on the reduction of flaring and vented solution gas at these sites in 2015 and 2016, including: the construction of new infrastructure, including a significant capital commitment to partner in a gas plant project that enables natural gas conservation in the region; operational changes; and increased infrastructure runtimes.

As a result, we have exceeded our target, reducing emissions by 75%, contributing to the gross emissions reduction in our Canadian operation from 2014 to 2016. Year over year, Vermilion was able to reduce emissions from our Saskatchewan assets from 2015 to 2016 by 76,476 tCO<sub>2</sub>e (62%).

### Purchase of Green Power in The Netherlands

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Starting in January 1, 2016, Vermilion began purchasing 100% green power from our largest power provider (of 3 providers) in our Netherlands Business Unit, resulting in a 97% reduction in Scope 2 emissions in NBU from 2015 to 2016. This represents an estimated 39,145 tCO<sub>2</sub>e avoided based on 2015 emission intensity levels for purchased energy and 2016 energy consumption. The Netherlands accounted for approximately 41% of Vermilion's gross Scope 2 emissions in 2015, and for less than 2% in 2016.



## Incinerator Technology Upgrade in France

Vermilion is reducing flaring in many of our locations, because it is more efficient to incinerate or use gases such as methane (instead of flaring or venting them). In turn, this allows Vermilion to reduce our greenhouse gas emissions and our potential impact on nearby communities.

Our 2015 replacement of incinerator technology at our battery in Parentis has significantly reduced flaring, and helped us be a good neighbor to the community. Given the proximity of the glass windows of the tomato greenhouse that is co-located with our battery, it was particularly important to find a solution that avoided strong vibrations. Our installation of the new incinerator, along with new piping, scrubber and safety fencing in the incinerator area has resulted in no noise, vibration or smoke. Because the incinerator runs at a much higher temperature (900°C instead of 400-500°C) and combusts the gas in a much taller, 9-metre stack, significantly more of the gases – such as methane, sulphur oxides and nitrogen oxides – are safely incinerated, minimizing the gas that has to be flared.



## Feature: Renewable Energy Projects in France

In 2008, Vermilion teamed up with four agricultural engineers who wanted to create an economically and ecologically viable greenhouse operation in which to grow tomatoes. The concept was to use geothermal energy from our Parentis oilfield's produced water to supply an industrial-sized tomato greenhouse operation. Today,



this ongoing operation has catalyzed an entire agricultural sector, and we have expanded the concept to heating residential neighbourhoods in two additional communities in France. This represents strong partnerships developed over the years that represent added value for the areas that host our activities.<sup>203-2</sup>

In Parentis, our commitment to provide heat free-of-charge and free of carbon emissions for 25 years has made the greenhouse operation profitable to build and operate, which in turn has enabled our partners to expand, and has attracted other business to the area. Today, this sector represents:

- 15,000 tonnes of CO<sub>2</sub> avoided every year
- 15,000 tonnes of fresh tomatoes produced annually
- 27 hectares of greenhouses built, comprising four greenhouses
- 350 long-term jobs created, and
- 37 million euros invested in economic diversification in a rural area.

We are incredibly proud of the role we played in catalyzing this economic growth, with its social and environmental benefits. Not only have we helped create new jobs in a new industry, we have effectively decoupled economic growth from greenhouse gas emissions for this sector.



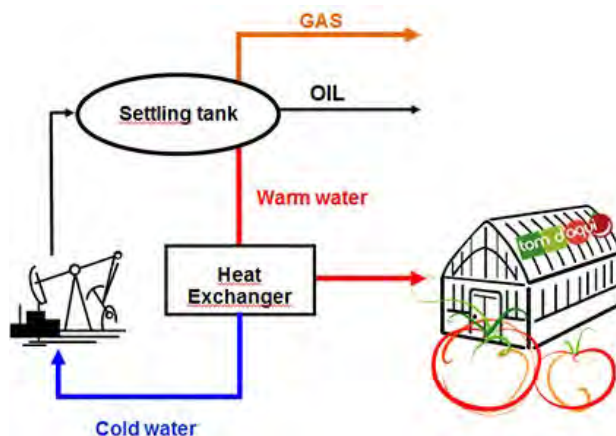
Here's how it grew.

## It began with tomatoes

It was the mayor of Parentis who brought Vermilion and the tomato growers together in the mid-2000s. The ensuing discussions led to the rezoning and issuance of related municipal permits, and the signing of our 25- year partnership agreement. Tom D'Aqui (the tomato growing cooperative) built their first 10-hectare greenhouse next to our Parentis battery, we installed the heat exchange technology, and brought the operation online in 2012, establishing that this model not only worked, but worked well.

## How it works

- Vermilion's petroleum extraction process in the Parentis field 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 Tom d'Aqui (while ensuring fluids from the two water systems never come into contact).
- The second water system heats the Tom d'Aqui greenhouse located next to the Parentis battery.
- Vermilion reuses the produced water by pumping it back underground to maintain reservoir operating pressures and enhance production.



Within the overall agricultural sector listed above, the direct impact of our produced water geothermal system is 7,500 tonnes of tomatoes grown annually, 10,000 tonnes of greenhouse gases avoided each year and 250 direct jobs. This heating system also allows the Tom d'Aqui greenhouse to be heated without carbon emissions, a key element in their certification as an eco-greenhouse. The project also reduces the cost of traditional tomato growing operations in the region, allowing the producers to compete with warmer climate producers.

## Recognition from the Government of France

This shared focus on innovative technology and environmental responsibility earned our partnership the 2013 Circular Economy Award for Industrial and Regional Ecology from the French government, recognizing economically successful enterprises that operate within a circular economy. G4-OG2/3

## Sharing Our Expertise

Based on our success, we supported AVENIA, an industry partnership that advises the French government on energy, to launch 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.

## Expanding the Agricultural Sector in Parentis

By demonstrating proof-of-concept, our partnership with Tom d'Aqui has been credited as being a catalyst for three new projects launched independently of Vermilion. But that's only part of the story: our heat contributes 40% of the sector's needs (representing the 15-hectare Tom D'Aqui greenhouse next to our battery); the other projects have been developed using recycled biomass, with the result that this is now the largest tomato production in France from non-fossil fuel sources.

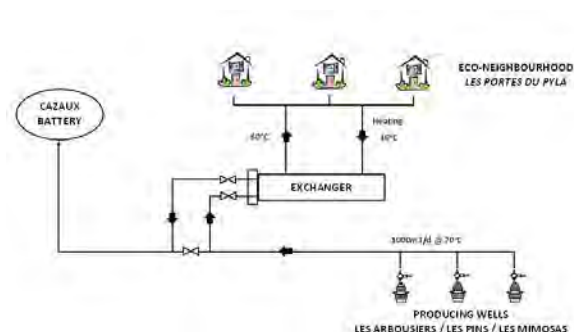
## Moving from Agriculture to Housing, in La-Teste

We are using a similar geothermal concept to support an Eco-Neighborhood being built in La-Teste. This 30-year partnership with the city and the French land developer Pichet is using our recycled geothermal energy to heat 450 apartments, saving 50% of the heating bill for the residents and 680 tonnes per year of CO<sub>2</sub>. The community, which has reserved one third of the apartments for low-income social housing, also features a community centre and various sports facilities. The technology works the same way as in our greenhouse partnership:



➤ Vermilion produces oil from three fields in the Arcachon Basin (part of the Aquitaine Basin): Les Mimosas, Les Pins and Les Arbousiers. The production is gathered in a central battery where approximately 1,000 m<sup>3</sup>/day of water at a temperature of 70 degrees Celsius is produced along with the oil.

➤ A heat exchanger on our battery allows the transfer of the energy from the produced water to the eco-neighborhood, producing up to 80% of the heat needed; the remaining 20% will be supplied by the use of gas resulting from biomass, thanks to a COFELY/ENGIE boiler.





## Expanding the geothermal concept to Itteville

In March 2018, Vermilion signed an eco-responsibility agreement with the municipality of Itteville, France, to expand this concept of co-generation to a planned eco-district of 900 apartments dedicated to social housing. We have committed to providing this neighbourhood with geothermal heat from our produced water until 2040. Construction is expected to take four to five years, with residents saving 500 euros per year per home, along with 2 tonnes of CO<sub>2</sub>. This agreement confirms a shared desire to create value by enhancing the heritage and resources of the area.



## Feature: Renewable Energy Projects in The Netherlands

As a key part of the low-carbon transition, Vermilion is leveraging the proof-of-concept established in France to develop renewable energy projects in our operations in The Netherlands. There, the Dutch Energy Agreement (DEA) is targeting a 400% increase in renewable energy contribution from 4% in 2013 to 16% in 2023. We are playing an important role by demonstrating that, beyond using natural gas as a lower carbon transition fuel, synergies exist between natural gas production and green or renewable energy. We are also using our core business, based on geoscience expertise and our existing infrastructure to investigate several important avenues for supporting the DEA's target.

### The Green Deal: Ultra Deep Geothermal Energy

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Vermilion was one of seven companies to partner with the Dutch government, EBN (a natural gas exploration and production company owned by the government) and TNO (a Dutch non-profit for applied scientific research) to investigate ultra-deep (4,000 metres) geothermal energy that would produce the high heat needed by industrial energy customers. We signed the Green Deal in 2017 as an important step in establishing the regulations, technologies, standards and understanding needed to develop ultra-deep geothermal energy. Companies involved participated in pilot projects in various regions (Heerenveen for Vermilion), with the intention to develop those projects by 2020.

As part of our participation, we undertook a geological evaluation of the available 3D seismics. From this, we have concluded that the required Dinantien carbonate platform in Heerenveen is probably not present. So, although we certainly see the possibilities for ultra-deep geothermal in the Netherlands, we consider the opportunities for the successful development of a project at this specific location in Heerenveen within the frameworks outlined to be too small. This means that our consortium was not able to sign the cooperation agreement that marks the next phase of the Green Deal program. We are proud of what has been achieved in a short time within the partnership in the Green Deal UDG, however, and are pleased that the other six consortia will continue the program.

### Gas to Geothermal Energy Conversion

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Work to convert two of our depleted gas wells in Middenmeer, in North Holland, to geothermal production is underway, including integrity checks and technology refits. This project is expected to supply first heat in the

first quarter of 2020, with 200 to 250 cubic metres of water per hour. This will support a nearby regional agriculture hub with approximately 10 to 15 MWh of energy, or up to 30% of their heat demand. The hub – Agriport A7 – is one of the largest contiguous greenhouse areas in Europe, with 320 hectares and 9 tomato-producing customers.

## Combined Gas and Geothermal Exploration

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This work in Noord Holland focuses on developing geothermal assessment plans on new gas drilling prospects so that a single drilling operation can address the potential of both natural gas and geothermal energy opportunities. It makes good economic sense: geothermal projects are currently economically viable only in very good reservoirs and with subsidies. Combining gas and geothermal exploration increases the return on investment significantly.

## Biogas Production

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In Harlingen, we are investigating the production of biogas from low-grade biomass such as verge grass, manure, straw and wood. This project involves cleaning and upgrading the biogas to green gas at our Harlingen Treatment Centre, with the potential to process and dry the green gas to produce fertilizer. We are aiming at 2021 for this project.

## Solar Installation

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We are pleased to be partnering in a project that will see 1,800 solar panels placed on the roofs of our offices in Harlingen, producing approximately 0.5MW of energy that will be exported to the national energy grid. This project is a key part of our intention to play a sustainable role in the areas where we are operating. The project, which includes our partners NPG Energy and Ludan Renewable Energy, is currently in the installation layout phase.



## Water Stewardship

Environmental stewardship of the planet's water resources includes two key focus areas for Vermilion: protection of water bodies, including oceans, lakes and rivers; and increasing our water efficiency. We support this using key performance indicators on water use in the **Performance Metrics** section of this report. This includes water withdrawal by source, and percentage and volume of water recycled and reused.

### Protection of Water Bodies

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None of our operations take place in areas that are considered water stressed. However, we take seriously our responsibility to protect the water bodies close to our operations, whether they are on the Bordeaux coastline or Parentis Lake in France, or off Australia's northwest shelf. We take a location-specific approach, complying with or exceeding water and operating regulations in all of our business units. We also monitor water as a risk factor, understanding that a decreased water supply due to climate change, for example, would impact our operations. The following projects are just a few examples of our water protection work.

#### France

In France, we are a member of the Regional Water Basin Committee in the Ambès region located on an estuary that leads to the Atlantic Ocean. This is one of six water basin committees in the country, and brings together both private and public stakeholders to discuss and define the main priorities of the region's water policy and the protection of its natural aquatic environments. In 2014, our Ambès superintendent was elected to the committee for a six-year term. The committee was responsible for the creation of a master plan for water development and management (SDAGE), and is often referred to as the "Water Parliament" of the basin.<sup>94-16</sup>



Inland from the French coast, our operations on and near Parentis Lake are benefiting from our boat, the Pelican. Acquired in 2015, the boat is used for our lake rounds, and is increasing our presence and

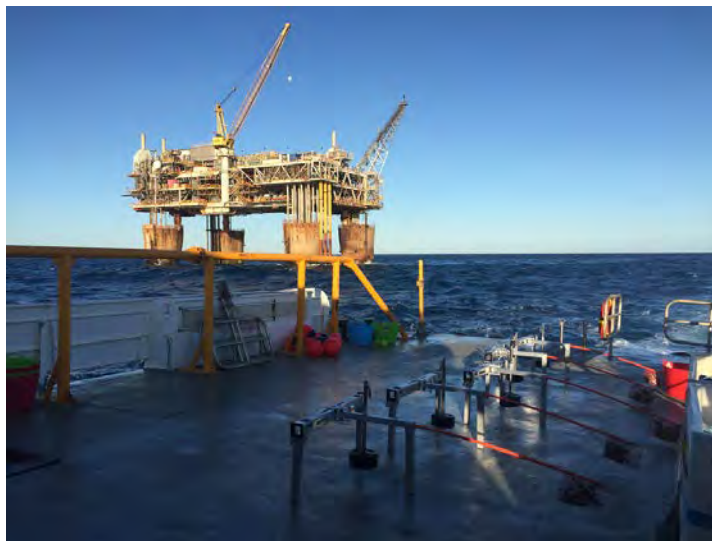
monitoring, offering a gain in intervention efficiency. From an environmental perspective, the engines meet the latest standards and regulations. This reduces fuel consumption and the boat's wake, thus offering greater respect for other lake users such as fishermen and sailors. In addition, we have organized several Days of Caring through our community investment activities that see our staff caring for Lake Parentis, clearing non-native invasive species from the shoreline, for example.

## Australia

Like all facilities operating in Australian federal waters, Vermilion's Wandoo Facilities are required to have a Safety Case and Environment Plan that are assessed and accepted by the Regulator, NOPSEMA. The Safety Case and Environment Plan are objective- and evidence-based assessments requiring the Regulator to be satisfied that:

- The identified hazards and potential impacts are suitable for the Wandoo Facilities
- Hazards are assessed and managed to as low and reasonably practical, and
- A management system is in place to support and monitor implementation of hazard controls on a continual basis.

The Environment Plan requires review and resubmission at a minimum frequency of five years. It addresses the environmental impact from Operations, Well Construction and oil spill response. We undertook a comprehensive environmental risk and impact assessment for all our activities within the Wandoo Field. In addition, we maintain a comprehensive spill response plan, which is aligned to our spill hazards and operating environment, and we review and test its capability requirements annually. NOPSEMA accepted our Operations and Well construction Environment Plans in 2014 and 2017 respectively. As part of our commitment, Vermilion provides a summary of the environment plan, including contact information, which can be found [here](#)). The Regulator conducts regular inspections to confirm compliance. Four inspections were conducted in 2017, with no enforcement action required.



As part of this work, we undertook offshore marine monitoring in late 2015 within the Wandoo Field. This included the characterization of the epifauna using a remotely operated vehicle (ROV), water sampling and sediment sampling to:

- Obtain data to support Wandoo discharge modelling and impact analysis
- Obtain additional baseline data for future impact assessments
- Establish environmental data to support asset retirement planning

The ROV environmental monitoring survey revealed an ecosystem at Wandoo with a number of transient species, including turtles, sharks and rays, spotted at the base of our platforms. Corals, sponges, clams and molluscs cover the concrete structure.

The program was developed to identify Vermilion’s potential impacts on the marine environment in order to achieve further improvements in environmental management if required. As a major stakeholder in the region, it is Vermilion’s responsibility to the wider community to assist in maintaining the health of the regional environment.



# Water Efficiency

## Reducing our Water Use

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France is an excellent example of a successful water reduction program. Between 2015 and 2017, we have reduced water consumption by 30%, from 682,000 cubic metres to 478,374. A significant part of this was our conversion of a suspended oil well located at our Vic Bilh asset into a saline water producing well for injection support.

## Hydraulic Fracturing

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Hydraulic fracturing is a government-regulated technology that has been successfully used in North America for more than 60 years. Some formations will not produce hydrocarbons without hydraulic fracturing, so we elect to use this rock stimulation method on some wells in Canada and the United States to enhance their productive capability. We use fracturing only in semi-conventional clastic reservoirs, and we do not develop shale reservoirs. Our semi-conventional development activities in North America are also much less frac intensive than shale development, requiring much lower volumes of sand and water. Based on independent economic assessments, we also have derived better returns for shareholders as a result of developing this expertise in semi-conventional reservoirs as opposed to shales. Government regulations, in combination with industry operating practices and Vermilion's own focus on Best-in-Class HSE and Operational Excellence, help ensure safeguards are in place to protect the environment, including freshwater aquifers, and to ensure safe and responsible operations.

Vermilion remains a conventional producer in Europe, not employing hydraulic fracturing in any of our European operations.

**Improving Water Management:** As the single largest component used in hydraulic fracturing operations, water is essential to developing unconventional oil and gas wells in North America. Operationally and environmentally, we continue to work hard to establish the most efficient and sustainable ways of sourcing and reusing this resource<sup>303</sup>

Approximately one-quarter of the water we pump during a Canadian frac, for example, returns immediately during flowback operations. We then employ fracture fluid technology that lets us re-use this flowback water on subsequent wells. We are also assessing where we can adjust completion schedules to optimize water use, and recycle flowback water to reduce overall make-up water requirements. Finally, we are also looking at the potential of using produced water (non-potable water produced with oil and gas) from our operations to replace fresh water use.

**Groundwater Protection:** We operate in accordance with strict regulations and Industry Recommended Practices (IRPs) that protect groundwater sources through exploration and production phases. For example, Petroleum Services Association of Canada's IRP #14 ensures that non-toxic, water-based drilling fluid is used

when penetrating freshwater aquifers down to the government-established base of groundwater protection, then steel casing is put in place and cemented in permanently to isolate the upper portion of the well while drilling to the final reservoir target.

In Alberta, the Cardium formation is Vermilion's shallowest development play that uses hydraulic fracturing practices to stimulate the formation. Here, as in our other areas of operation, we employ micro-seismic and computer modeling to ensure we are not contacting or impacting potable water aquifers through our activities. The micro-seismic events measured during hydraulic fracturing operations indicate the height and extent of the fracture system. The seismic data tells us that a typical hydraulic fracture height in the Cardium interval is up to 100 metres. We also know that the Cardium interval is typically found at 1,750 metres below surface and the base of the deepest groundwater is at approximately 600 metres. We therefore maintain an approximate separation distance of 1,100 metres of rock from the base of groundwater protection to the top of the hydraulic fracture.

**Ensuring Containment:** Flowback fluids are contained onsite in a closed system, where they are later treated and re-used, or disposed of at authorized facilities at the conclusion of a program. In addition to accessing current technology in our operations, Vermilion has been involved in trialing many new and emerging technologies, and we have invested time and money in an effort to make them viable. Examples of this include research and development to implement technology that allows for the treatment and re-use of advanced gel chemical fracture flowback fluids. This approach reduces the freshwater needed to complete wells and the volume of water disposed of via deep well injection.

We publicly disclose all of the additives we use to FracFocus, as well as via our regulatory submissions. We continue to work to decrease the required concentration of our additives and we work with our fracturing suppliers to source even better alternatives for future consideration.





# Land Stewardship

## WE UNDERSTAND OUR RESPONSIBILITY TO BE CAREFUL STEWARDS OF THE LAND.

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Throughout our operations, we focus on a systematic approach to caring for the land – from **environmental assessments** during our exploration activities, to wildlife and vegetation protection during production, to planning and implementing reclamation activities when drilling is complete. Our business units take a proactive approach to understanding the assets we own and/or operate, to assess both associated risks and potential opportunities. This involves a team approach, in which staff from Operations, Asset Integrity, Facilities, Engineering and HSE come together to identify priority sites for review. This may result in improvements to our internal processes or technologies, and to external elements such as updating community signage. These reviews are benefitting from the ever-increasing power of mapping and imaging technology, and from traditional observation techniques such as aircraft surveillance of pipeline routes, along with the personal observations from our staff as they visit these sites.

The following examples represent just a few of the related activities that we undertake.

### Reducing Impacts on Communities

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We carefully consider issues such as traffic, noise, light, and flora/fauna impacts in our development and operations activities. We work with local residents and independent environmental groups to help reduce our impact. This includes early engagement with local communities through town hall sessions and other communications avenues to discuss our full development plans, and listen to any concerns, questions or feedback that is provided to help shape our plans. For more detail on our stakeholder engagement, see our **Report** section.

### Reducing Surface Footprint

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Wherever possible, we reduce our footprint on the land by re-using existing well sites, flow lines and surface facilities to support development. This reduces the aerial impact of our operations and removes the need for the construction of new well sites or pipelines.

In Canada and the United States, we often employ the use of horizontal wells. Where sub-surface geometries are conducive, we program these wells from a single



surface location or pad, with up to eight wells being drilled from a single location. Pad drilling reduces the aerial extent of the well site, surface facilities, pipelines and roads. To put this in perspective, a single vertical well has a surface impact of approximately 1.7 hectares, while an eight-well pad surface impact is only about 0.5 hectares per well. We also use this horizontal approach in France, in the Neocomian and Vulaines fields.



This reduction in surface footprint is amplified by the longer horizontal lengths of wells. In the past, one pad site would have developed about 20 sub-surface hectares (1,400 metres in horizontal length); today, we can develop 1,000 hectares from a single pad site (up to 3,000 metres of horizontal length).

Our Pembina stacked play in Canada has the added environmental benefit of being able to share surface infrastructure, such as roads, pipelines and processing facilities between several different plays. This higher well density reduces driving distances, and therefore emissions associated with development, monitoring and maintenance of wells. It also optimizes equipment and energy used during development and maintenance of productive reservoirs.

We also re-used existing well sites in The Netherlands during our 2014/2015 drilling program. We drilled nine wells, six of which were from pre-existing well sites, thus reducing the need for the construction of new sites or pipelines. In addition, all of our lease sites are sealed with asphalt to isolate them from the groundwater table. We collect rainwater that falls on our lease sites in a series of berms, gutters and storage systems so we can confirm first that it is safe to release back to the environment.

In Australia, our use of horizontal drilling and the re-use of existing well sites also reduces disturbance of the sea floor and impact on marine life.

## Supporting Biodiversity

Wherever possible, we support local biodiversity efforts, from analyzing the **marine environment** **marine environment** off Wando to **protecting ungulates** **protecting ungulates** such as deer and elk during critical winter months in Alberta.

304-1

In France, thanks to a request from a local beekeeper, honey is now harvested from our Saint-Méry battery site. It turns out that our site is a strategic location for beehives due to the presence of many fruit trees and acacias that are favourable to the proper development of the hives. The eight hives were placed in a small grove mainly composed of acacias, to position the bees as close as possible to flowers around which they can forage, thus optimizing the quantity and quality of the honey produced. The bee chosen is part of the "Buckfast" species, which is particularly hardy and renowned to be minimally aggressive. <sup>304-2</sup>



In Australia, Vermilion has led the effort to develop the regional oiled wildlife response capability necessary to effectively manage the impact of a large oil spill on wildlife. We funded the necessary equipment (a rapid response unit that would receive, assess and treat oiled wildlife) and training, created a register of wildlife responders, and developed “at call” capacity for support specialists. To enable all-industry access, we subsequently donated this equipment to the Australian Marine Oil Spill Centre, which is funded by the Australia Upstream and Downstream Industry group, which includes Vermilion. This initial investment and follow-up support from Vermilion has enhanced oiled wildlife response within Western Australia. While we hope there is never a reason to use this equipment, we are proud to have meaningfully increased the spill response capabilities of industry in our operating area. 203-2 304-2



# Communities Dashboard

## Homelessness and Poverty

### 1.2 Reduce at least by half the proportion of people living in poverty

We invested \$621K in 2017 towards programs that contributed to either preventing homelessness and poverty, or supporting those currently experiencing these conditions.

Our work encompasses **several flagship partnerships** in our business units, along with the following corporate initiatives:



**2018:** The Vermilion Energy Family Centre at Wood's Homes in Calgary has supported 47 families and a total of 194 children, youth and their parents / caregivers since opening in June 2015.

**2009-2018:** Vermilion is proud to have been the co-presenting sponsor for Hockey Helps the Homeless for 10 years. In 2017, four local charities, YWCA Calgary, Inn from the Cold, Boys & Girls Clubs of Calgary and Habitat for Humanity, impacted the lives of hundreds of families as a result of funds raised by this tournament.

### 2.1 End hunger and ensure access by all people to safe, nutritious and sufficient food

Our funding focus on homelessness and poverty encompasses several programs that support ending hunger, including our **Days of Caring:**

**Canada 2018:** 8,400 hot lunches funded and served at the Drop-In Centre, Canada's largest shelter serving those who are homeless

**Denver 2018:** staff filled hamper orders for the Food Bank of the Rockies

**The Netherlands 2017:** in addition to our funding of 22,000 euros, staff supported the launch of KinderRestos in Leeuwarden, helping children learn about healthy food and lifestyles

**France 2017:** every year, staff in Melun support the Restos du Coeur food drive at a local supermarket, informing customers about the campaign and accepting food donations.



Health & Safety Promotion

3.6 Halve global deaths and injuries from road traffic accidents

We established our **Global Emergency Responder Program** in 2017, to support critical equipment and training needs for emergency medevac and similar services in all of our business units.

In Australia we are proud to support The Royal Flying Doctor Service, helping purchase specialized equipment and supplies to outfit a new aircraft to operate as an intensive care unit in flight.



Environmental Stewardship

15.5 Action to reduce degradation of natural habitat, halt the loss of biodiversity and protect and prevent the extinction of threatened species

In addition to our funding for environmental stewardship, staff in our business units consistently support local conservation and biodiversity efforts. In 2017, we contributed 121 staff hours, including the following **Days of Caring**:

**Canada 2018:** 88 staff hours for conservation protection at the Nature Conservancy of Canada's Busenius Property

**The Netherlands 2017:** in addition to €30K in funding, the Day of Caring supported the Frisian nature reserve of Fryske Gea, removing willow and birch trees, and thinning brush to promote the growth of a protected plant species known as "Wilde Gagel".



Celebrating our Cultures

17.17 Encourage and promote effective public, public-private and civil society partnerships

We believe in partnering with our communities to better understand their needs and how we can best support them, and to amplify the value of organizations within them. We have key **community and civil society partnerships** in each of our major business units.



Progress on Commitments

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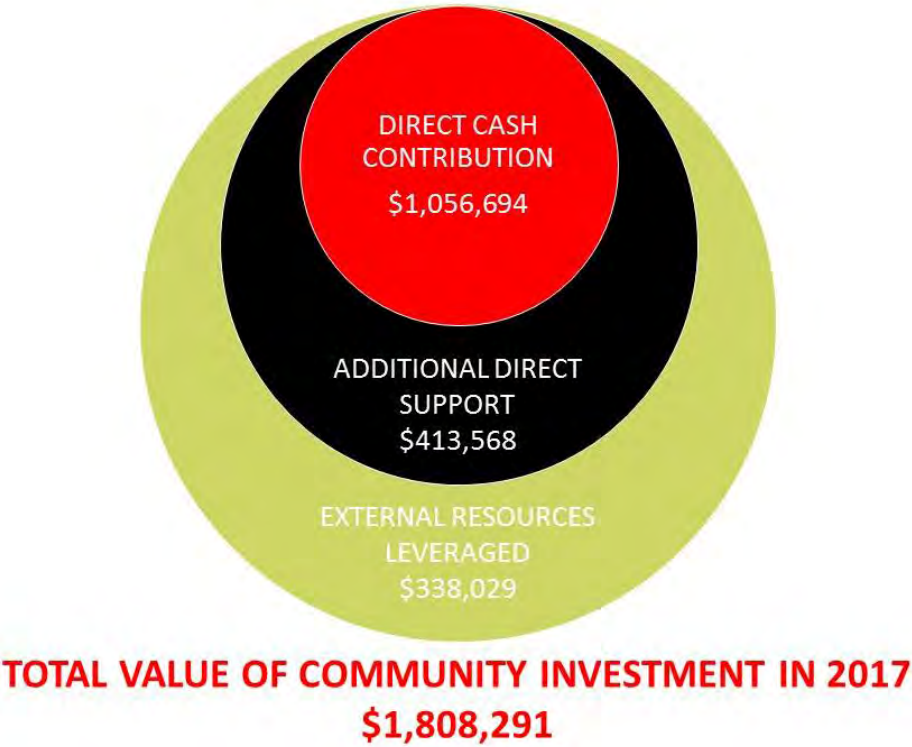
Target 2017	Target 2018	Target 2019
Launch Global Funding Initiative to support non-profit emergency response providers in all business units.  100% Achieved	Develop and launch Ways of Caring program in our Germany Business Unit.  100% Achieved	Develop and launch Global Funding Initiative to support environmental stewardship in all business units.  In Progress

Give Back

**Direct cash contribution:** to non-profit and charitable organizations

**Additional direct support:** in-kind support, such as materials and staff volunteering during working hours

**External resources leveraged:** staff donations



Give Time

- > 115 grants
- > 15,252 staff hours volunteered during non-working hours



➤ \$77,572 in grants

## Give Together

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- 29 Days of Caring
- 1,932 staff hours for 22 organizations during working hours
- Value of \$122,614

## Notable Highlights:

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### JINC in the Netherlands

In 2016 Vermilion launched a flagship partnership to support JINC in The Netherlands. Believing that all youth deserve a fair chance in the labour market, JINC helps young people ages 8-16 through vocational orientation and learning social skills in the workplace. We continued our support in 2017 and 2018, providing both financial support and participating in the flash internship program. Our support contributes to our community investment focus on Homelessness & Poverty.



### What our staff told us about the program in 2017:

In our 2017 Great Place to Work annual survey, 95% of staff globally agreed with the statement “I feel good about the ways we contribute to the community.” In addition to the ratings statements, the confidential survey also asks what makes Vermilion a great place to work. Here are a few of the comments related directly to our community support:

- The way it gives back to the community and does different sustainability projects like the Tomato Greenhouse in France. Each location gets to give back to something important for that community.
- Vermilion's Ways of Caring provide me great opportunities to give back in my community personally through volunteer grants and together with my colleagues through the Days of Caring.
- Our Investment in the Community and encouragement to do the same is second to none.
- The commitment to community investment, corporate culture, safety and the Environment. The tomatoes and the eco-neighborhood is creative and brilliant.
- Commitment to community involvement. (Days of Caring, United Way...)

## What our communities told us about the program in 2017 and 2018:

*What our communities told us about the program in 2017 and 2018: "Our VIPs (Very Important Patients) are the reason we fly. They're the reason we wake up each day striving to find the most innovative ways to succeed. For patients who are critically sick or injured, every second matters. As long as there are people in need of critical care, we'll be there to offer them support. Vermilion makes this possible – you ride along with us on every mission. You help ensure our crew receive the top training and that they have access to the tools they need to save lives."*

### STARS

*"On behalf of St Bart's and our clients I sincerely thank everyone at Vermilion for your support, friendship and willingness to partner with us to help people in need to rebuild their lives. Vermilion have shown an ongoing commitment to the work of our organization and to the people that we are here to support. Your support has been integral in helping achieve our mission to assist the homeless of today to rebuild their lives and act to prevent the homelessness of tomorrow. Thank you."*

Nina Ulyett, General Manager, St. Bart's



# Our Approach to Communities

## Our Approach

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Vermilion focuses on a shared value approach to strategically investing in our communities. This is embodied in our mission statement: to deliver superior rewards to investors, employees, partners and the communities in which we operate.

## Why This Matters

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Our communities comprise a wide diversity of people and organizations, but they have one key thing in common: they care deeply about the safety, environmental stewardship and corporate citizenship that we bring to our local operations. At the same time, our people care deeply about their communities –whether we work there or live there, these are the places we call home. We identify areas where the needs of our communities, our business and our people intersect, providing opportunities to offer support where it can do the most good for all.

## Our Management

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Through our Vermilion Ways of Caring program, we give back, we give time and we give together. This strategic approach to community investment exemplifies “The Vermilion Way” of getting things done –demonstrating leadership, embracing responsibility and achieving excellence. The program provides a global framework, with clearly identified priorities and activities, that can be customized for local needs within our business units.

## Give Back

This represents our strategic funding initiatives, focused in four key investment areas:

- **Homelessness & Poverty.** We work with social investment agencies that support the most vulnerable in our community through measurable, impactful programs to break the cycle of poverty and homelessness, because we believe healthy, vibrant communities include all community members in their success.
- **Health and Safety Promotion.** We invest in results-oriented programs that enhance the wellbeing and safety of individuals and communities, sharing our best-in-class approach to a health and safety culture that is fully integrated into every facet of Vermilion's operations.
- **Environmental Stewardship.** We partner with organizations that use science-based best practices to enhance environmental conservation and education, contributing to healthy, resilient, sustainable communities today and in the future.

- **Celebrating Vermilion's Cultures.** We support the local cultures of our diverse locations to ensure that their traditions and contributions are recognized and preserved.

## Give Time

We support the wide variety of not-for-profit and charitable organizations that our staff and their immediate families volunteer at outside of working hours, using a tiered volunteer grant approach: the greater the volunteer hours, the greater the donation to the organization. This allows us to directly support the causes and community organizations that mean the most to our people.

## Give Together

We encourage our people to spend up to two days per year volunteering on company time as part of a team or larger Day of Caring project. These hands-on opportunities help us to put caring into action, building collaborative, trusted and genuine relationships between our people, our company and our communities.

## Measurement

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### Funding Metrics

Vermilion has developed a sustainable funding model that links our community investment budget to key business performance metrics over a rolling average of the past three years. This is applied globally to the entire budget, and then by business unit to establish local budgets. This helps to provide stable funding for community investment over time by levelling out one-time changes in annual revenue and production, it directly links company activities with investment in our communities, and it leads best practices in the community investment sector.

### People Metrics

We link our community investment work directly with our staff satisfaction metrics through our annual, confidential, third-party-conducted Great Place to Work® people survey. This is carried out through quantitative responses to the specific question "I feel good about the ways we contribute to the community" and through qualitative comments received in the open-ended survey questions.

In addition, we use anonymous staff surveys to develop community investment activities (such as proposing and choosing organizations for our Days of Caring and activities for our United Way fundraising campaign) and to assess their success and potential for continuous improvement.

### Performance Metrics

We use various metrics on the spectrum between Inputs, Outputs and Outcomes to measure the results of our strategic community investment funding, with an increasing emphasis on working with our community partners to establish the means and support to measure outcomes:

- Inputs: the value of our funding, staff volunteering (inside and outside working hours) and external resources leveraged
- Outputs: the scope of support provided (such as numbers of meals or workshops) and the number of people impacted by programs that we support
- Outcomes: the measurable impacts of the support we provide, including Social Return on Investment

As an example of outcomes measurement, our flagship partnership with the YW of Calgary (the Skills Training Centre project that provided 20-week construction training courses for women facing barriers to achieving viable employment) included a study into its Social Return on Investment. Our external consultant found that an SROI ratio of \$4.65 of value created per \$1 invested was a conservative estimate of the ongoing future value of the Centre's services.

In addition to the Great Place to Work® survey metrics, we report the value of our community investments following the London Benchmarking Group's standard "circles" of investment to reflect our total contribution:

- Direct cash contribution: our donations to non-profit and charitable organizations
- Additional direct support: adds in-kind support, such as donations of materials for Days of Caring and staff volunteering during working hours
- External resources leveraged: adds value of staff and third-party donations

## Evaluation and Adjustment

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We use these metrics with additional information on our community investment program and activities as part of Vermilion's quarterly senior management team reviews and subsequent reports to the Board of Directors.

We adjust our funding and activities as needed, but on an annual basis at minimum. We identify and contribute to best practices as they develop, increase communication to staff to promote specific initiatives, and respond to changing needs within specific business units. For example, we updated our Ways of Caring framework in 2013 to include our four current pillars, we established our sustainable funding model in 2015, and we launched our Municipal Linkage Program in The Netherlands in 2016. We also launched an online third-party application in 2016 to streamline grant application administration for both Vermilion and our community partners.

In 2017, we assessed our programs in light of the Sustainable Development Goals, identifying opportunities to drive key targets within the Goals that are aligned with our Ways of Caring. This work highlighted the importance of our approach to SDG 17.17, on partnerships.

## Volunteering Around the World

### Calgary, Canada

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We were pleased to bring the power of our volunteer efforts back to Wood's Homes in 2018 for our Corporate Day of Caring. 112 staff – and 6 family members - provided 562 hours to assist with landscaping, painting, furniture moving and assembly, window cleaning and preparing for snacks and lunch. Wood's Homes' new Inglewood Campus was desperately in need of sprucing up before its doors opened to Calgary's homeless and at-risk youth.



### Drayton Valley, Canada

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In June 2018, 10 staff from Drayton Valley volunteered with the Nature Conservancy of Canada to support the ongoing conservation and stewardship of the NCC's Busenius Property.



t Working alongside NCC staff, our volunteers spent the day removing 750 metres of barbed wire fence, making the landscape a safer habitat for wildlife to live on and travel through.



## Leeuwarden, The Netherlands

In July 2017, the Finance and Human Resources teams from our Harlingen and Amsterdam locations stepped out of their offices and into their aprons to lend a hand as we helped one of our new Municipal Linkage Program partners, Resto VanHarte, launch KinderRestos in the Frisian capital of Leeuwarden. Research indicates that when families suffer from a lack of resources, it has a negative impact on the quality of food offered to children. The KinderResto offers the children a safe environment where they are taught about a healthy lifestyle through hands-on workshops where fun and team spirit are a priority. Our team helped local KinderResto volunteers cook a healthy lunch for the entire primary school, including oatmeal pancakes, and run a sports event for the children in the afternoon.



## Perth, Australia

In November 2017, 10 staff from our Australia Business Unit volunteered with St Bartholomew's House, helping residents from the Community Supported Residential Units enjoy the organization's first-ever camp. St Bartholomew's House, which we've supported since 2009, helps people who are homeless or at risk of homelessness achieve positive life outcomes. The 4-day camp took place at the Tuppin House in Guilderton and was jam-packed with workshops and activities encouraging the residents to get out of their comfort zone and experience new things.. Working alongside St Bart's staff, our volunteers (along with a couple of furry companions) joined campers in the activities, adding positive encouragement.



## Paris Basin, France

In March 2017, employees helped out with a food drive to support the Restos du Coeur in Rubelles, in our Paris Basin region. Restos du Coeur provides those experiencing poverty with access to free meals and supports their social and economic integration, as well as





economic integration, as well as any action against poverty in all its forms. Twice a year, their Melun unit holds a food drive in a supermarket, where volunteers inform customers about the campaign and accept food donations. Our staff have been supporting this event since 2014, because, as one of our volunteers says, "Heart is life. We have to give as long as we can."



## Denver, Colorado

Our US Business Unit regularly volunteers at the Food Bank of the Rockies in Denver, which is almost 100% volunteer driven. In January 2018 8 staff sorted, counted, bagged, boxed and distributed 13,280 pounds of food for vulnerable families. In May 2018, 11 staff were on hand helping in the distribution warehouse, filling orders for the organizations supported by the Food Bank, including local churches, schools, and mental health facilities.



## Berlin, Germany

In September 2017 staff from Ölheim-Süd gave their time to support a beautification project in support of The Lebenshilfe Peine-Burgdorf GmbH, an organization that promotes the participation of people with disabilities in community life. A lot of hard work and effort went into building a raised flower bed that delighted residents and visitors.





## Key Community Partnerships

Corporately and around the world, Vermilion focuses our strategic approach on long-term investments that make a measurable and significant difference for our communities. Wherever possible, our partnerships go beyond funding to include staff time and other support for the organizations. This is reflected in the partnership matrix that we have developed that provides a consistent framework to assess potential projects. The matrix also includes alignment with one or more of our key pillars, sound organizational governance, long-term impact, benefits to stakeholders, potential for multi-sector collaboration, volunteering opportunities, capacity building potential, and measurability.

Here are some of our key flagship partnerships:

- › Vermilion Energy Family Centre at Wood's Homes in Calgary, Canada
- › Municipal Linkage Program in The Netherlands
- › JINC in The Netherlands
- › Vermilion Energy / YW of Calgary Employment Resource Centre
- › Calgary Zoo
- › Global Emergency Responder Program
- › Early Childhood Development Centre in Drayton Valley, Canada
- › St. Bartholomew's House in Perth, Australia
- › United Way of Calgary and Area, Canada
- › Charles W. Berard Undergraduate Scholarship in Calgary



### Vermilion Energy Family Centre at Wood's Homes in Calgary, Canada

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In June 2015, Wood's Homes opened the doors of the Vermilion

Energy Family Centre and their Whole Family Treatment Program. This intensive, short-term program serves families from across Canada who are struggling with complex issues including mental illness, crisis management, parenting strategies and child development. It offers a home-away-from-home where the entire family can receive mental health treatment at the same time and under the same roof.



Research has established a clear link between mental health and risk factors for living in poverty or becoming homeless. In 2013, we committed \$1 million to help create the Vermilion Energy Family Centre at the Bowness campus of Wood's Homes, because investing in the well-being of children and their families creates critical opportunities to support positive development into adulthood.

Here, Wood's Homes focuses on the five primary areas of family interaction: developing child well-being, increasing family safety, enhancing home environment, strengthening parenting capabilities and improving family interactions. Each family member is professionally assessed and receives individualized treatment during their stay of either five days or over a weekend. Wood's Homes also provides support post-treatment to help maintain goals and to help families incorporate newfound strategies into their everyday life.

We are proud of the groundbreaking role that the Vermilion Energy Family Centre is helping to play in delivering family-centred treatment.



## 2018 Update:

Between the program's inception and June 2018, Wood's Homes has provided 51 family stays and helped a total of 194 individuals, including children, youth and their parents/caregivers at the Vermilion Energy Family Centre. The program incorporates significant outcome measurements, including the Systematic Clinical Outcome and Routine Evaluation, Brief Family Distress Scale and family satisfaction outcomes. These are indicating significant positive changes in individual perceptions of their family's problems, strengths, ability to manage crisis, effectiveness of communication and level of distress. Wood's Homes uses these results to evolve the program for optimal effectiveness. Vermilion is pleased to be continuing our support subsequent to the completion of our initial flagship funding.

## Municipal Linkage Program in The Netherlands

Vermilion's Netherlands Business Unit launched its Municipality Linkage Program (MLP) in September 2016, to help us visibly support the communities where we are active. We identified 12 municipalities that are priorities for the company, based on our operational activities. Within those locations, we then reached out to key stakeholders such as residents, community organizations and municipalities to help identify strategic community investment options that we could consider funding. Today, we're pleased that community organizations proactively seek us out. In every application, we look for a community need and a local solution that helps to address it.

Projects supported by the MLP touch all pillars of Vermilion's community investment priorities, with the majority of funds spent in the area of homelessness and poverty. While the program only launched in the latter half of 2016, it has already seen tremendous potential in terms of community and employee engagement.



## 2018 Update:

The MLP is already proving a success, with our 2017 program supporting 80 organizations in 14 municipalities, providing €350,000 in support. Our related Day of Caring in September saw 48 staff choosing from five of our MLP projects, helping out with a sports day for vulnerable children, supporting elderly community members with physical disabilities, barn painting, food preparation in support of Resto VanHarte, taking care of an orchard, and assisting in a non-profit bakery.

## Resto Van Harte

**Resto Van Harte****Zonnenbloem and Lions****It Fryske Gea****Fier****JINC in The Netherlands**

In addition to the MLP, we established a flagship partnership between JINC and Vermilion in 2017. As a non-profit organization, JINC believes that every child deserves a fair chance in the labour market; it helps young people aged 8 to 16 years through vocational orientation in the workplace and learning (social) skills. Vermilion's funding was used to open the first JINC branch in Leeuwarden, making Vermilion a founding partner there. We are also contributing through the efforts and knowledge of our staff.

**2017 Update:**

At the Leeuwarden launch of JINC in 2017, more than 150 students received job interview training from professionals, including five colleagues from Vermilion. The goal of our coaching is to ultimately provide them with better opportunities in the labour market. In addition, we provided several opportunities for one-day internships for JINC youth at Vermilion,

including one in which youth replaced our business unit managing director and operations manager for a day.



## Vermilion Energy / YWCA Calgary Employment Resource Centre

The YW Employment Resource Centre (ERC) continues to be a vibrant and busy employment centre, serving a diversity of women from different cultural backgrounds, a variety of career streams and a full assortment of education and training needs. Its intentions are:

- To empower women, and be a meeting place to learn and network,
- To provide career coaching, counselling, and mentorship,
- To be a place for clients to assess their skills and strengths, and set and realize their goals
- To increase employability skills and social inclusion
- To reduce job loss and prevent recidivism of unemployment and underemployment.



Vermilion began its partnership with the YW of Calgary in 2007 when we provided a \$2.5 million donation, along with \$1.5 million raised by Vermilion's founders, board of directors and staff, to create the Vermilion Energy/YWCA Calgary Skills Training Centre. In 2013, recognizing the changing economic and employment climate in Calgary and a critical need to serve greater numbers of women, the Skills Training Centre transitioned to become the Employment Resource Centre. While our formal partnership has now concluded, we are proud of the significant impact this partnership has had on our community, and the foundation we helped establish for employment resourcing.

Poverty affects 1 in 10 Calgarians directly, and all of us indirectly. Across demographic groups – such as indigenous peoples, visible minorities, people with disabilities, single parents and recent immigrants – women experience higher rates of poverty than men. Annually, the YW supports on average more than 6,700 women, children and men through shelter, housing, counselling, basic need items, parenting supports, childcare, language and employment skills development programs and services.



## Calgary Zoo

The **Vermilion Energy Empty Backpack Program** aligns with two of our community investment priority areas:

homelessness & poverty and environmental stewardship. Through hands-on activities and up close and personal encounters with animals, the Calgary Zoo is connecting audiences of all ages with nature and inspiring actions for wildlife conservation.

### 2018 Update

In 2017 the Calgary Zoo was able to offer 28 programs to 17 schools, impacting 572 students and 145 teachers. In addition to our financial support, we are proud to bring our people power to our partnerships as well. In October 2017, our HR team helped the Calgary Zoo package up browse, supporting 2 months' worth of winter feed for animals like the gorillas, hippos and lemurs.



Vermilion began a partnership with the Calgary Zoo for the 2014/2015 school year, providing a donation to support the **Vermilion Energy Empty Backpack Program**. Through this program we are helping to ensure that learning opportunities which are so vital to a well-rounded education and critical to our future are available to all Calgary's school children, regardless of financial or family circumstance. Through this program we are helping to ensure that learning opportunities which are so vital to a well-rounded education and critical to our future are available to all Calgary's school children, regardless of financial or family circumstance.

## Global Emergency Responder Program

Nothing is more important to Vermilion than the safety of our staff, our contractors and our communities. The Global Emergency Responder Program supports this commitment by investing in emergency response organizations that serve the communities where we work and live. Our donations will help fund equipment and other high-priority needs for these non-profit and charitable organizations, which are dedicated to keeping our communities and our people safe. These include the following organizations – we are grateful for their service each and every day.

### Canada – STARS Air Ambulance

Every day, STARS takes care of some of the sickest and most critically-injured patients in Western Canada. This translates to thousands of people every year who rely on STARS to get them to hospitals safely, where they can access the advanced care they need. STARS is already an operational partner for CBU, as their dispatch centre manages our Emergency Call Centre.

### The Netherlands – KNRM – Rescue and Help on Water

Since 1824, KNRM, the Royal Dutch rescue organization, has provided boats and lifeguards to ensure the health and



safety of those on lake and coastal waters. Each year, the 1,300 highly committed and professionally trained volunteers save more than 3,000 people. We support the Harlingen location, closest to our operations.

### **Australia – Royal Flying Doctor Service**

The Royal Flying Doctor Service of Australia is one of the largest aeromedical organizations in the world. With a "waiting room" of 7.69 million square kilometres, this organization made contact with over 283,000 patients last year and flew over 26 million km. RFDS operates throughout Australia, so it's a great match for both our Perth-based staff and our platform staff who come from locations throughout the country. RFDS also backs up our industry medical response organization, and as a remote area provider, supports our staff both at work and at play.

### **France – SNSM – Les Sauveteurs en Mer**

For over a century, Les Sauveteurs en Mer has been committed to safeguarding human life at sea and on the coast. With 32 Training & Intervention Centres and 218 stations through the country, they conduct 5,200 interventions and rescue 7,700 people each year. We'll be supporting their Lège Cap Ferret location, closest to our operations in Cap Ferret.

### **United States – Weston and Niobrara County Fire Protection Districts**

The Weston County Fire Protection District, a local community volunteer fire department, is close to our operations in Wyoming, and relies heavily on donors to ensure their firefighters have the necessary training, trucks and protective equipment to safely respond to fires. In addition to three fire stations, the District places wildland engines at strategic rural locations to provide quicker responses to wildfires.

### **Germany – East Frisia Fire Brigade**

In Germany, similarly we have identified a local fire brigade in East Frisia – a front line rescue organization that would support our operations.

### **Croatia – Croatian Mine Action Centre**

CEE has selected the Croatian Mine Action Centre, an organization that carries out demining operations in areas where mine danger presents a direct safety problem for the population. It is estimated that there are over 40,000 mines covering more than 420,000 sq. km in Croatia. This has an important operational alignment for Vermilion; before we conduct seismic work in one of our exploration blocks, we will need to ensure that demining is conducted.



### **Early Childhood Development Centre in Drayton Valley, Canada**

Since 2012, Vermilion has committed financial and volunteer support to our V-Powered Kids partnership with the Town of

Drayton Valley's Early Childhood Development Centre (ECDC). The program supports the critical before-school hours with a staff member, breakfast that the kids help prepare, and transport to school, along with additional recreational programming for families after school and in evenings. In 2013, our funding also began supporting an Early Childhood Coach who will assist everyone in a child's environment, from families to childcare staff.

Quality early childhood development programming has been cited as a key component of effective poverty reduction strategies. The Drayton Valley ECDC serves a number of low-income and at-risk families, and our support has enabled families to take part in programming that they would likely not be able to afford otherwise.



In addition, our partnership has developed over the years to include building a natural fence around the playground, hosting pancake breakfasts for the community, and funding recreational activities such as Zumba. The town of Drayton Valley recognized this combination of support from staff and the company when they presented the annual Corporate Service Award to Vermilion in 2013, recognizing community members that have dedicated themselves to making a difference to this central Alberta town.

"When you support children, the difference you can make is just exponential," says Bernice Taylor, the Centre's Program Manager. "This is a child who walks through the school doors and is able to learn, a child who feels like they belong, a child who's not in the child justice system. It's empowerment – I think we empower the children here to be very confident, to say 'I can be anything.' "



## St. Bartholomew's House in Perth, Australia

Since 2009, Vermilion has supported St. Bartholomew's House in Perth, an organization that helps people who are homeless or at risk of homelessness achieve positive life outcomes. It offers a variety of crisis and transitional programs to help people build the connections, skills and confidence to live productive, independent lives in the community and break the cycle of homelessness. Through St. Bart's, Vermilion's funding invests in essential facilities and services that will help transform the lives of some of the city's most vulnerable people. Our contributions support the Lime Street social housing facility and a social inclusion officer for older women at the Kensington Street Accommodation Service, who coordinates activities and outings that positively contribute to the health and wellbeing of the residents.





Vermilion staff have also organized Days of Caring at St. Bart's since 2012, including a gardening day, social events such as a mini-Olympics, care home renovations, garden landscaping and two camp events for those living in Community Supported Residential Units.



## United Way of Calgary and Area, Canada

We believe that for a city to be great, it has to be great for everyone. At the same time, no single organization can tackle systemic issues such as poverty, school completion and isolation in the community alone. United Way brings together all areas of community – business, government, academia, school boards and others – to address social issues at the root cause and to develop long-term strategies to solve them.



**United Way**  
**Calgary and Area**

**United. Building a great city for everyone.**

That's why Vermilion has been contributing to United Way since 1996 and organizing an annual United Way workplace campaign since 1998. United Way recognized our efforts with a 2013 Spirits of Gold award in the category of Leading the Way (under 500 employees). Spirits of Gold is United Way's recognition gala, celebrating the spirit and generosity of the people, agencies and workplaces that displayed outstanding leadership and dedication during United Way's annual Campaign. United Way also recognized our 2015 workplace campaign's backpack mountain as one of its "Top 5 Campaign Moments" – our staff filled some 200 backpacks for Inn from the Cold, a local charity that focuses on supporting families that are homeless.

### 2018 Update:

Since 1996, Vermilion has contributed more than \$3.8 million to support local non-profit organizations and social programs through the United Way.

Our 2018 campaign raised over \$200K, with more than 84% staff participation through pledging, events and contests. We are proud of this achievement, particularly its impact on the community. This donation will provide more than 100 Calgarians access to basic needs, including food and shelter, ensure more than 400 children and youth are empowered and successfully transition to adulthood, or connect more than 600 Calgarians to necessary resources to support their wellbeing.



## Charles W. Berard Undergraduate Scholarship

Vermilion set up the Charles W. Berard Undergraduate Scholarship in Natural Resources and Environmental Law in 2009 to pay tribute to the life, work and memory of Charlie Berard, a dear friend to many at Vermilion, and our corporate secretary from 1997-2009. Each year, a scholarship of approximately \$5,000 is awarded to a continuing undergraduate student entering third year in the Faculty of Law at the University of Calgary with a demonstrated interest in Natural Resources & Environmental Law. A key part of the criteria is a candidate who best demonstrates leadership and support to the community, and alignment to Vermilion's core values of Excellence, Trust, Respect and Responsibility.



## GRI CONTENT INDEX

GRI G4 Indicator and GRI Standard	Indicator Description	Location or Description	UN SDG	UN Global Compact	RobecoSAM	EU Directive 2014/95/EU Guidelines on non-financial reporting 2017/C 215/01	Assurance
	SS    Sector Supplement						
GENERAL STANDARD DISCLOSURES							
STRATEGY AND ANALYSIS							
G4-1 102-14	CEO sustainability statement	<a href="#">Message from our Chief Executive Officer</a>	12.6	15, 19			
G4-2 102-15	Description of key impacts, risks and opportunities	<a href="#">Our Approach to Sustainability</a>	12.6	15, 19	Materiality		
ORGANIZATIONAL PROFILE							
G4-3 102-1	Name of organization	Vermilion Energy Inc.	12.6	1		4.1	
G4-4 102-2	Primary brands, products, services	<a href="#">About Vermilion</a>	12.6	1		4.1	
G4-5 102-3	Location of headquarters	Calgary, Alberta, Canada	12.6	1		4.1	
G4-6 102-4	Countries of operation	<a href="#">About Vermilion</a>	16.6-7	1		4.1	
G4-7 102-5	Nature of ownership and legal form	<a href="#">About Vermilion</a>	16.6-7	1		4.1	
G4-8 102-6	Markets served	<a href="#">About Vermilion</a>	16.6-7	1		4.1	
G4-9 102-7	Scale of organization	<a href="#">About Vermilion</a> <a href="#">Economic &amp; Operational Highlights</a> <a href="#">Performance Metrics</a>	16.6-7	1		4.1	
G4-10 102-8	Workforce metrics	<a href="#">Performance Metrics</a>	8.5	1	Gender diversity	4.6b	
G4-11 102-41	Employees under collective bargaining	<a href="#">Performance Metrics</a>	8.8	1	Freedom of association	4.6b	
G4-12 102-9	Organization's supply chain	<a href="#">About Vermilion</a> <a href="#">Our Value Chain</a>	8.1	1	Supply chain awareness	2, 4.6e	
G4-13 102-10	Significant changes during reporting period	<a href="#">About Vermilion</a>	12.6	1		4.1	
G4-14 102-11	Precautionary approach	<a href="#">Our Approach to Sustainability</a>	12.2	9		4.6a	
G4-15 102-12	External initiatives to which company subscribes	<a href="#">Our Approach to Sustainability</a> <a href="#">Reporting Initiatives</a>	16.6-7	12, 13, 14	Payment transparency	3.3	
G4-16 102-13	Memberships in associations	<a href="#">Associations</a> <a href="#">Reporting Initiatives</a>	16.6-7	12, 13, 14	Policy influence	3.3	
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES							
G4-17 102-45	List all organizational entities	<a href="#">About our Report</a>	16.6-7	1	Reporting	4.1	
G4-18 102-46	Define report content and Aspect Boundaries	<a href="#">About our Report</a> <a href="#">Identifying Issues</a> <a href="#">Material Issues</a>	12.6	1	Reporting	3.1	
G4-19 102-47	List all material Aspects	<a href="#">Identifying Issues</a> <a href="#">Material Issues</a>	12.6	1	Materiality	3.1	
G4-20 103-1	Explain Aspect Boundaries within organization	<a href="#">Identifying Issues</a> <a href="#">Material Issues</a> <a href="#">Materiality Analysis</a>	12.6	1		3.1	
G4-21 103-1	Explain Aspect Boundaries outside organization	<a href="#">Identifying Issues</a> <a href="#">Material Issues</a> <a href="#">Materiality Analysis</a>	12.6	1	Materiality	3.1	
G4-22 102-48	Restatements of previous info, if applicable	<a href="#">Performance Metrics</a>	12.6	1		3.1	
G4-23 102-49	Significant changes from previous reporting periods	<a href="#">About our Report</a>	12.6	1		3.1	
STAKEHOLDER ENGAGEMENT							

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GRI G4 Indicator and GRI Standard	Indicator Description	Location or Description	UN SDG	UN Global Compact	RobecoSAM	EU Directive 2014/95/EU Guidelines on non-financial reporting 2017/C 215/01	Assurance
G4-24 102-40	List stakeholder groups engaged by the organization (SS including indigenous peoples)	<a href="#">Our Value Chain Stakeholder Engagement</a>	16.7	2, 17, 21	Stakeholder engagement	3.5, 4.6c	
G4-25 102-42	Basis for identifying and selecting stakeholders with whom to engage	<a href="#">Our Value Chain Stakeholder Engagement</a>	16.7	2, 21	Stakeholder engagement	3.5, 4.6c	
G4-26 102-43	Approach to stakeholder engagement	<a href="#">Stakeholder Engagement</a>	16.7	2, 21	Stakeholder engagement	3.5, 4.6c	
G4-27 102-44	Key topics and concerns raised through stakeholder engagement (SS including indigenous peoples)	<a href="#">Stakeholder Engagement</a>	16.7	2, 21	Stakeholder engagement	3.5, 4.6c	
REPORT PROFILE							
G4-28 102-50	Reporting period	Performance Metrics Data to Dec 2016	12.6	1		5	
G4-29 102-51	Date of most recent previous report	2017	12.6	1		5	
G4-30 102-52	Reporting cycle	Ongoing – annual data updates for all material issues, with other updates through the year	12.6	1		5	
G4-31 102-53	Contact point for questions about report	Yvonne Jeffery, Sustainability Lead <a href="mailto:yieffery@vermilionenergy.com">yieffery@vermilionenergy.com</a>	12.6	1		5	
G4-32 102-54 102-55	In accordance option & GRI Content Index	In accordance with GRI G4 Comprehensive, moving to GRI Standards in 2018	12.6	1		5	
G4-33 102-56	External assurance	Specific indicators, noted in GRI Content Index	12.6	1		5	
GOVERNANCE							
G4-34 102-18	Governance structure	<a href="#">Our Approach to Governance Proxy Statement &amp; Info Circular</a>	16.6-7	20	Corporate Governance	4.2	
G4-35 102-19	Process for delegating authority for economic, environmental & social topics to sr executives and other employees	<a href="#">Sustainability Governance</a>	16.6-7	1	Risk Governance Stakeholder engagement	4.2	
G4-36 102-20	Executive level position in EES	<a href="#">Sustainability Governance</a>	16.6-7	1	Risk Governance Stakeholder engagement	4.2	
G4-37 102-21	Consultation process between stakeholders and highest governance body on EES	<a href="#">Sustainability Governance</a>	16.6-7	1	Stakeholder engagement	4.2	
G4-38 102-22	Composition of highest governance body and committees	<a href="#">Our Approach to Governance Proxy Statement &amp; Info Circular</a>	16.6-7	20	Board structure, Gender diversity	4.2, 6	
G4-39 102-23	Is chair of highest governance body also an executive officer?	No	16.6-7	20	Corporate Governance	4.2	
G4-40 102-24	Nomination and selection process for highest governance body	<a href="#">Our Approach to Governance Proxy Statement &amp; Info Circular</a>	16.6-7	20	Diversity policy Board industry experience Average tenure	4.2	
G4-41 102-25	Processes for avoiding conflict of interest for highest governance body	<a href="#">Ethical Culture Proxy Statement &amp; Info Circular</a>	16.6-7	20		4.2	
G4-42 102-26	Highest governance body's roles in developing organization's purpose, value, mission, EES policies	<a href="#">Our Approach to Governance</a>	16.6-7	1		4.2	
G4-43 103-27	Measures to develop highest governance body's knowledge about EES	<a href="#">Our Approach to Governance</a>	16.6-7	1		4.2	
G4-44 102-28	Process of evaluating highest governance body's performance in EES	<a href="#">Our Approach to Governance Proxy Statement &amp; Info Circular</a>	16.6-7	1	Board effectiveness	4.2	
G4-45 102-29	Highest governance body's role in identifying EES risks and impacts	<a href="#">Risk Management Climate-Related Risks &amp; Opportunities</a>	16.6-7	1	Risk & Crisis Management	4.4	
G4-46 102-30	Highest governance body's role in reviewing effectiveness of EES risk management processes	<a href="#">Risk Management Climate-Related Risks &amp; Opportunities</a>	16.6-7	1	Risk & Crisis Management	4.4	
G4-47 102-31	Frequency of 4-46 review	Quarterly	16.6-7	1		4.4	
G4-48 102-32	Highest level of formal sustainability report review	CEO	16.6-7	1		4.2	
G4-49 102-33	Process for communicating critical concerns to highest governance body	<a href="#">Our Approach to Governance Proxy Statement &amp; Info Circular</a>	16.6-7	20	Risk Review	3.3	

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GRI G4 Indicator and GRI Standard	Indicator Description	Location or Description	UN SDG	UN Global Compact	RobecoSAM	EU Directive 2014/95/EU Guidelines on non-financial reporting 2017/C 215/01	Assurance
G4-50 102-34	Nature & # of concerns communicated	No critical concerns communicated: <a href="#">Performance Metrics</a>	16.6-7	20	Risk Review	3.3	
G4-51 102-35	Remuneration policies for highest governance body & sr exec	<a href="#">Proxy Statement &amp; Info Circular</a>	16.6-7	6, 7, 8	Executive Compensation	4.6b	
G4-52 102-36	Process for determining remuneration	<a href="#">Proxy Statement &amp; Info Circular</a>	16.6-7	6, 7, 8		4.6b	
G4-53 102-37	Process for stakeholder engagement in determining remuneration	<a href="#">Governance Dashboard</a>	16.6-7	7		4.6b	
G4-54 102-38	Ratio of annual total compensation of highest-paid individual to median annual total comp all employees	<a href="#">Governance Dashboard</a> <a href="#">Performance Metrics</a>	10.3	6, 7, 8	Compensation disclosure	4.6b	
G4-55 102-39	% annual increase of G4-54	<a href="#">Performance Metrics</a>	10.3	6, 7, 8	Compensation disclosure	4.6b	
ETHICS AND INTEGRITY							
G4-56 102-16	Organization's values, principles, standards such as codes of conduct and ethics	<a href="#">Ethical Culture</a>	16.5	12, 13, 14	Codes of Conduct	3.3	
G4-57 102-17	Mechanisms for seeking advice on ethical issues	<a href="#">Ethical Culture</a>	16.5	12, 13, 14	Systems / procedures	3.3	
G4-58 102-17	Mechanisms for reporting ethical concerns	<a href="#">Ethical Culture</a>	16.5	12, 13, 14	Reporting on breaches	3.3	
SPECIFIC STANDARD DISCLOSURES							
ECONOMIC							
Economic Performance							
DMA 103-1, 2,3		<a href="#">Our Approach to Business</a>	8.1	2			
G4-EC1 201-1	Direct economic value generated and distributed, including community investment	<a href="#">Performance Metrics</a>	8.1	2	Tax reporting Philanthropic activities	4.1a	LBG Canada audit of 2012-2016 community investment data; internal audit of 2017+ data
G4-EC2 201-2	Financial implications of climate change	<a href="#">Climate-Related Risks &amp; Opportunities</a> <a href="#">Approach to Climate-Related Issues</a>	13.1	9, 10, 11	Financial risks & opportunities – climate change	4.6a	
G4-EC2SS	Reduction in water use	<a href="#">Water Use</a> <a href="#">Performance Metrics</a>	14.1, 15.1	9, 10, 11		4.6a	
G4-EC3 201-3	Coverage of defined benefit plan obligations	<a href="#">Performance Metrics</a>	8.5	6, 7, 8		4.6b	
G4-EC4 201-4	Financial assistance received from government	<a href="#">Performance Metrics</a>	16.5	17		3.3	
G4-OG1	Volume and type of estimated proved reserves and production	<a href="#">Performance Metrics</a> <a href="#">Economic &amp; Operational Highlights</a>	8.1	1	Reserve replacement Natural gas bias Natural gas reserve life & production	4.1a	Evaluated by GLJ Petroleum Consultants, an independent qualified reserve estimator, in accordance with the Canadian Oil and Gas Evaluation Handbook and NI 51-101
ENVIRONMENTAL							
Energy							
G4-DMA 103-1, 2,3		<a href="#">Our HSE Approach and Management</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Measurement and Evaluation</a>	7.2-3	9, 10, 11		4.6a	
G4-EN3 302-1	Energy consumption within the organization	<a href="#">Performance Metrics</a>	7.2-3	9, 10, 11	Energy consumption	4.6a	
G4-EN4 302-2	Energy consumption outside of the organization (use of sold products)	<a href="#">Performance Metrics</a>	7.2-3	9, 10, 11		4.6a	
G4-EN5 302-3	Energy intensity	<a href="#">Performance Metrics</a>	7.2-3	9, 10, 11	Energy intensity	4.6a	
G4-EN6 302-4	Reduction of energy consumption	<a href="#">Performance Metrics</a> <a href="#">Energy and Emissions Reduction Projects</a>	7.2-3	9, 10, 11	Renewable energy consumption	4.6a	
G4-EN7 302-5	Reductions in energy requirements of products and services	N/A	7.2-3	9, 10, 11	CAFE improvement N/A	4.6a	

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GRI G4 Indicator and GRI Standard	Indicator Description	Location or Description	UN SDG	UN Global Compact	RobecoSAM	EU Directive 2014/95/EU Guidelines on non-financial reporting 2017/C 215/01	Assurance
OG-2	Total amount invested in renewable energy	<a href="#">Performance Metrics</a> <a href="#">Renewable Energy Projects in France</a> <a href="#">Renewable Energy Projects in the Netherlands</a>	7.2-3, 9.4, 17.17	9, 10, 11	Renewable energy production	4.6a	
OG-3	Total amount of renewable energy generated by source	<a href="#">Performance Metrics</a>	7.2-3, 17.17	9, 10, 11		4.6a	
Water							
G4-DMA		<a href="#">Our HSE Approach and Management</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Measurement and Evaluation</a> <a href="#">Water Stewardship</a> <a href="#">Water Efficiency</a>	6.1, 6.3-4, 6.6, 14.1, 15.1	9, 10, 11	Water consumption	4.6a	
G4-EN8 303-1	Total water withdrawal by source	<a href="#">Performance Metrics</a>	6.1, 6.3-4, 6.6, 14.1, 15.1	9, 10, 11	EP - Water	4.6a	
G4-EN9 303-2	Water sources significantly affected by withdrawal of water	No water sources significantly affected: <a href="#">Performance Metrics</a>	6.1, 6.3-4, 6.6, 14.1, 15.1	9, 10, 11	Water stressed areas	4.6a	
G4-EN10 303-3	Percentage and total volume of water recycled and reused	<a href="#">Performance Metrics</a>	6.1, 6.3-4, 6.6, 14.1, 15.1	9, 10, 11		4.6a	
Biodiversity							
G4-DMA		<a href="#">Our HSE Approach and Management</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Measurement and Evaluation</a> <a href="#">Land stewardship</a> <a href="#">Water Stewardship</a>	6.1, 6.6, 12.2, 14.2, 15.1, 15.5, 17.17	9, 10, 11	Biodiversity	4.6a	
G4-EN11 304-1	Biodiversity: operational sites in or adjacent to protected areas or areas of high biodiversity value	<a href="#">Land stewardship</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Water Stewardship</a>	6.1, 6.6, 12.2, 14.2, 15.1, 15.5, 17.17	9, 10, 11	Biodiversity	4.6a	
G4-EN12 304-2	Significant impacts of activities on biodiversity	<a href="#">Land stewardship</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Water Stewardship</a>	6.1, 6.6, 12.2, 14.2, 15.1, 15.5, 17.17	9, 10, 11	Biodiversity	4.6a	
G4-EN13 304-3	Habitats protected or restored	<a href="#">Land stewardship</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Water Stewardship</a>	6.1, 6.6, 12.2, 14.2, 15.1, 15.5, 17.17	9, 10, 11	Biodiversity	4.6a	
G4-EN14 304-4	IUCN red list species and national conservation list species	<a href="#">Land stewardship</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Water Stewardship</a>	6.1, 6.6, 12.2, 14.2, 15.1, 15.5, 17.17	9, 10, 11	Biodiversity	4.6a	
Emissions							
G4-DMA		<a href="#">Our HSE Approach and Management</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Measurement and Evaluation</a> <a href="#">Approach to Methane Emissions Reduction</a> <a href="#">Energy and Emissions Reduction Projects</a>	12.1-2, 13.1	9, 10, 11	Climate strategy Biodiversity GHG emissions targets / CDP / carbon pricing	4.6a	
G4-EN15,SS 305-1	Direct greenhouse gas (GHG) emissions (Scope 1)	<a href="#">Performance Metrics</a>	12.1-2, 13.1	9, 10, 11	Scope 1	4.6a	
G4-EN16 305-2	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	<a href="#">Performance Metrics</a>	12.1-2, 13.1	9, 10, 11	Scope 2	4.6a	
G4-EN17, SS 305-3	Other indirect greenhouse gas (GHG) emissions (Scope 3)	<a href="#">Performance Metrics</a>	12.1-2, 13.1	9, 10, 11	Scope 3	4.6a	
G4-EN18, SS 305-4	Greenhouse gas (GHG) emissions intensity	<a href="#">Performance Metrics</a>	12.1-2, 13.1	9, 10, 11		4.6a	
G4-EN19 305-5	Reduction of greenhouse gas (GHG) emissions	<a href="#">Performance Metrics</a> <a href="#">Approach to Methane Emissions Reduction</a> <a href="#">Energy and Emissions Reduction Projects</a>	12.1-2, 13.1	9, 10, 11	Methane emissions	4.6a	
G4-EN20 305-6	Emissions of ozone-depleting substances (ODS)	<a href="#">Performance Metrics</a>	12.1-2, 13.1	9, 10, 11		4.6a	
G4-EN21 305-7	NOX, SOX, and other significant air emissions	<a href="#">Performance Metrics</a>	12.1-2, 13.1	9, 10, 11	VOC emissions, SOx, dust, NOx	4.6a	
Effluents & Waste							

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GRI G4 Indicator and GRI Standard	Indicator Description	Location or Description	UN SDG	UN Global Compact	RobecoSAM	EU Directive 2014/95/EU Guidelines on non-financial reporting 2017/C 215/01	Assurance
G4-DMA		<a href="#">Our HSE Approach and Management</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Measurement and Evaluation</a>	14.1-2	9, 10, 11		4.6a	
G4-EN22 306-1	Total water discharge by quality and destination	<a href="#">Performance Metrics</a>	14.1-2	9, 10, 11		4.6a	
G4-EN23 306-2	Total weight of waste by type and disposal method	<a href="#">Performance Metrics</a>	14.1-2	9, 10, 11	Waste Hazardous waste	4.6a	
G4-EN24 306-3	Total number and volume of significant spills	<a href="#">Performance Metrics</a>	14.1-2	9, 10, 11	Hydrocarbon spills	4.6a	
G4-EN25 306-4	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention2 Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	<a href="#">Performance Metrics</a>	14.1-2	9, 10, 11		4.6a	
G4-EN26 306-5	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization’s discharges of water and runoff	None: <a href="#">Performance Metrics</a>	14.1-2	9, 10, 11		4.6a	
OG-5	Produced water by disposal method	<a href="#">Performance Metrics</a>	14.1-2	9, 10, 11		4.6a	
OG-6	Volume of flared and vented hydrocarbon	<a href="#">Performance Metrics</a>	14.1-2	9, 10, 11		4.6a	
OG-7	Drill mud & cuttings	<a href="#">Performance Metrics</a>	14.1-2	9, 10, 11		4.6a	
Overall							
G4-DMA		<a href="#">Our HSE Approach and Management</a> <a href="#">Our Approach to Environmental Stewardship</a> <a href="#">Measurement and Evaluation</a>	12.1-2	9, 10, 11		4.6a	
EN-29 307-1	Fines and number of sanctions for non-compliance with environmental laws and regulations	0	12.1-2	9, 10, 11	Environmental violations	4.6a	
EN-31 N/A	Total environmental expenditures	<a href="#">Performance Metrics</a>	12.1-2	9, 10, 11	ROI (environment)	4.6a	
SOCIAL							
Employment							
G4-DMA 103		<a href="#">Our Approach to People</a> <a href="#">Performance Management, Training and Development</a>	8.5, 16.1	6, 7, 8		4.6b	
G4-LA1 401-1	Total number and rates of new employee hires and employee turnover by age group, gender, and region	<a href="#">Performance Metrics</a>	8.5	6, 7, 8	Turnover rate	4.6b	
G4-LA2 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	<a href="#">Performance Metrics</a> <a href="#">Our Approach to People</a>	8.5	6, 7, 8		4.6b	
G4-LA3 401-3	Return to work and retention rates after parental leave, by gender	<a href="#">Performance Metrics</a>	8.5	6, 7, 8		4.6b	
Occupational Health and Safety							
G4-DMA		<a href="#">Our HSE Approach and Management</a> <a href="#">HSE Training</a> <a href="#">Our Approach to Safety</a> <a href="#">HSE Perception Survey</a>	3.4, 3.6, 8.8	6, 7, 8	Health, Safety & Wellbeing OHS Training and Education	4.6b	
G4-LA5 403-1	Percentage of total workforce represented in formal joint management–worker health and safety committees to help monitor / advise on occupational health and safety	<a href="#">Performance Metrics</a>	3.6, 8.8	6, 7, 8	Occupational health and safety	4.6b	
G4-LA6 403-2	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	<a href="#">Performance Metrics</a> <a href="#">Safety Dashboard</a>	3.6, 8.8	6, 7, 8	Absentee rate TRIF / LTI Fatalities	4.6b	
G4-LA7 403-3	Workers with high incidence or high risk of diseases related to their occupation	<a href="#">Performance Metrics</a>	3.4, 8.8	6, 7, 8	Occupational diseases	4.6b	
G4-LA8 403-4	Health and safety topics covered in formal agreements with trade unions	<a href="#">Performance Metrics</a>	8.8	6, 7, 8		4.6b	
OG-13	Process safety events	<a href="#">Performance Metrics</a>	8.8	6, 7, 8	Process safety events	4.6b	
Training and Education							



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G4-DMA		<a href="#">Our Approach to People</a> <a href="#">Performance Management, Training and Development</a>	8.2, 8.5	6, 7, 8	Trend in employee engagement	4.6b	
G4-LA9 404-1	Average hours of training per year per employee by gender, and by employee category	<a href="#">Performance Metrics</a>	8.2, 8.5	6, 7, 8	Training & development inputs	4.6b	
G4-LA10 404-2	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	<a href="#">Performance Management, Training and Development</a>	8.2, 8.5	6, 7, 8	Employee development programs	4.6b	
G4-LA11 404-3	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	<a href="#">Performance Metrics</a>	8.2, 8.5	6, 7, 8	Performance appraisal	4.6b	
HUMAN RIGHTS							
Non-discrimination							
G4-DMA		<a href="#">Our Approach to People</a> <a href="#">Sustainability Policy</a>	5.2	3, 4, 5		4.6b	
G4-HR3 406-1	Total number of incidents of discrimination and corrective actions taken	<a href="#">Performance Metrics</a>	5.2	3, 4, 5		4.6b	
Indigenous Rights							
G4-DMA		<a href="#">Ethics &amp; Anti-Corruption Sustainability Policy</a> <a href="#">Our Approach to Communities</a> <a href="#">Stakeholder Engagement</a>	2.3	3, 4, 5		4.6b	
G4-HR8 411-1	Total number of incidents of violations involving rights of indigenous peoples and actions taken	<a href="#">Performance Metrics</a>	2.3	3, 4, 5	Human rights assessment	4.6b	
Human Rights Grievance Mechanisms							
G4-DMA		<a href="#">Ethics &amp; Anti-Corruption Sustainability Policy</a> <a href="#">Our Approach to Communities</a>	8.8, 16.1	3, 4, 5		4.6c	
G4-HR12 103-2	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	<a href="#">Performance Metrics</a>	8.8, 16.1	3, 4, 5		4.6c	
SOCIETY							
Local Communities							
DMA		<a href="#">Stakeholder engagement</a> <a href="#">Environmental impact assessments</a> <a href="#">Community development and investment</a>	1.2, 7.2-3, 16.7, 17.17	16, 18	Impact measurement and valuation Local cultural heritage Indigenous peoples	4.6b	
G4-SO1 413-1	Percentage of operations with implemented local community engagement, impact assessments and development programs	100%: <a href="#">Community development and investment</a> <a href="#">Our Approach to Communities</a> <a href="#">Volunteering Around the World</a> <a href="#">Key Community Partnerships</a>	1.2, 2.1, 3.6, 4.4, 4.6, 5.2, 5.3, 6.6, 8.2-6, 10.2, 11.4	16, 18	Active community engagement, consultation, EIA / SIA results Group-wide strategy	4.6b	
G4-SO2 413-2	Operations with significant actual and potential negative impacts on local communities	As a responsible energy producer, Vermilion has, in addition to our overall HSE approach, established management tools and processes that are specific to the protection of the health and safety of our workers and our communities: Public and community safety: <a href="#">Public safety and emergency response</a> Potential environmental impacts: <a href="#">Environmental impact assessments</a> <a href="#">Approach to methane reduction</a> <a href="#">Approach to climate-related issues</a>	3.6, 6.6, 7.2, 7.3, 9.4, 12.1-2	16, 18	Relocation programs (note: no relocations of local people or communities)	4.6b	
Anti-corruption							
DMA		<a href="#">Ethics &amp; Anti-Corruption</a>	16.5	12, 13, 14	Code of business conduct	3.3	
G4-SO3 205-1	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	<a href="#">Performance Metrics</a>	16.5	12, 13, 14		3.3	



GRI CONTENT INDEX							
GRI G4 Indicator and GRI Standard	Indicator Description	Location or Description	UN SDG	UN Global Compact	RobecoSAM	EU Directive 2014/95/EU Guidelines on non- financial reporting 2017/C 215/01	Assurance
G4-SO4 205-2	Communication and training on anti-corruption policies and procedures	<a href="#">Performance Metrics</a>	16.5	12, 13, 14		3.3	
G4-SO5 205-3	Confirmed incidents of corruption and actions taken	<a href="#">Performance Metrics</a>	16.5	12, 13, 14	Reporting on breaches	3.3	
G4-SO6 415-1	Political donations	<a href="#">Performance Metrics</a>	16.5	12, 13, 14, 17	Policy influence	3.3	
G4-SO7 206-1	Anti-competitive practices	No legal actions	16.5	12, 13, 14	Anti-competitive practices	3.3	
G4-SO8 419-1	Fines for non-compliance	<a href="#">Performance Metrics</a>	16.5	12, 13, 14		3.3	

MATERIAL TOPIC	2012	2013	2014	2015	2016	2017	Context	GRI
ECONOMIC IMPACT								
Gross petroleum and natural gas sales: \$M	1,083,103	1,273,835	1,419,628	939,586	882,791	1,098,838		102-7
Canada	304,202	382,005	537,788	320,613	252,867	330,903		102-7
France	388,410	453,315	431,252	281,422	246,863	268,103		102-7
Netherlands	123,528	139,570	123,815	129,057	100,707	108,060		102-7
Germany			41,962	41,384	29,049	68,696		102-7
Ireland				57	109,156	153,330		102-7
Central & Eastern Europe					0	0		102-7
Australia	266,963	298,945	283,481	162,765	136,835	154,391		102-7
United States			1,330	4,288	7,314	15,355		102-7
Operating costs, excludes transportation, royalties and G&A: \$M	178,442	195,043	232,307	225,938	222,185	242,267		102-7
Canada	55,418	55,804	76,178	89,085	71,543	80,444		102-7
France	54,907	66,997	61,729	50,718	50,000	51,002		102-7
Netherlands	19,149	20,617	24,041	22,746	20,796	21,212		102-7
Germany			8,686	10,956	12,379	20,176		102-7
Ireland				15	18,646	17,596		102-7
Central & Eastern Europe					0	0		102-7
Australia	48,968	51,625	61,432	51,676	47,507	50,139		102-7
United States			241	742	1,314	1,698		102-7
Employee wages and benefits costs: \$M	116,134	134,729	168,552	155,638	139,838	137,831		102-7
Canada	71,167	86,714	95,021	79,066	73,642	70,581		102-7
France	17,672	19,945	24,948	22,419	19,216	22,904		102-7
Netherlands	9,598	9,514	14,378	19,192	18,605	14,492		102-7
Germany			681	3,787	3,850	5,851		102-7
Ireland				0	0	0		102-7
Central & Eastern Europe					569	991		102-7
Australia	17,697	18,556	29,628	26,248	18,820	17,715		102-7
United States			3,896	4,986	5,136	5,297		102-7
Dividends declared: \$M	223,717	242,599	272,732	283,575	299,070	311,397		102-7
Interest payments: \$M	27,586	38,183	49,655	59,852	56,957	57,313		102-7
Taxes paid: \$M	181,913	218,359	157,336	51,115	19,678	32,107		102-7
Canada	1,582	1,403	1,420	1,091	1,097	527		102-7
France	63,006	94,524	66,901	23,764	2,867	10,556		102-7
Netherlands	25,648	34,132	4,154	12,152	6,624	(3,331)		102-7
Germany			44	0	0	0		102-7
Ireland				0	0	0		102-7
Central & Eastern Europe					0	0		102-7

MATERIAL TOPIC	2012	2013	2014	2015	2016	2017	Context	GRI
Australia – includes PRRT and corporate taxes	91,677	88,300	84,817	14,108	9,090	24,355		102-7
United States			0	0	0	0		102-7
<b>Royalties paid: \$M</b>	<b>52,084</b>	<b>67,936</b>	<b>108,000</b>	<b>65,920</b>	<b>54,284</b>	<b>74,476</b>		EC1SS
Canada	31,667	40,891	65,563	28,144	21,475	33,258		EC1SS
France	20,417	27,045	28,444	26,958	27,091	28,565		EC1SS
Netherlands	0	0	5,014	3,082	1,462	1,722		EC1SS
Germany			8,613	6,479	2,089	6,655		EC1SS
Ireland				0	0	0		EC1SS
Central & Eastern Europe					0	0		EC1SS
Australia	0	0	0	0	0	0		EC1SS
United States			366	1,257	2,167	4,276		EC1SS
<b>Community investment (also see communities metrics): \$M</b>	<b>718</b>	<b>1,076</b>	<b>1,345</b>	<b>1,048</b>	<b>1,392</b>	<b>1,470</b>		102-7
Canada	531	801	919	722	947	852	Includes corporate program costs	102-7
France	117	188	189	158	109	187		102-7
Netherlands	41	29	114	89	225	315		102-7
Germany			0	0	9	2		102-7
Ireland				0	0	0	Does not include CI portion of JV costs	102-7
Central & Eastern Europe					0	3		102-7
Australia	29	58	124	65	95	101		102-7
United States			0	14	7	10		102-7
<b>Direct economic value distributed: \$M</b>	<b>780,594</b>	<b>897,925</b>	<b>989,927</b>	<b>843,086</b>	<b>793,404</b>	<b>856,861</b>	Total: operating costs through community investment above	102-7
Economic value distributed in Canada Business Unit	160,365	185,613	239,101	198,108	168,704	185,662		102-7
Economic value distributed in France Business Unit	156,119	208,699	182,211	124,017	99,283	113,214		102-7
Economic value distributed in Netherlands Business Unit	54,436	64,292	47,701	57,261	47,712	34,410		102-7
Economic value distributed in Germany Business Unit			18,024	21,222	18,327	32,684		102-7
Economic value distributed in Ireland Business Unit				15	18,646	17,596		102-7
Economic value distributed in CEE Business Unit					5,136	5,300		102-7
Economic value distributed in Australia Business Unit	158,371	158,539	176,001	92,097	75,512	92,310		102-7
Economic value distributed in US Business Unit			4,503	6,999	4,057	6,975		102-7
<b>ASSETS, DEBT &amp; EQUITY</b>								
Net land position: acres	1,807,024	2,207,800	2,539,700	2,734,045	6,158,614	6,621,826	2012-13: Cda FR Aus NL; 2014-5: + Hungary US; 2016: + Croatia	102-7
Common shares outstanding (basic): MM	99	102	107	112	118	122		102-7
<b>Market capitalization: \$ billions</b>	<b>5.13</b>	<b>6.37</b>	<b>6.12</b>	<b>4.21</b>	<b>6.68</b>	<b>5.58</b>		102-7
Fund flows from operations: \$M	557,728	667,526	804,865	517,167	510,791	602,565		102-7
Fund flows from operations per basic share	5.69	6.61	7.63	4.71	4.41	5.00		102-7
Fund flows from operations per diluted share	5.62	6.51	7.51	4.65	4.36	4.92		102-7

MATERIAL TOPIC	2012	2013	2014	2015	2016	2017	Context	GRI
Net earnings: \$M	190,622	327,641	269,326	(217,302)	(160,051)	62,258		102-7
Net earnings per basic share	1.94	3.24	2.55	(1.98)	(1.38)	0.52		102-7
Capital expenditures: \$M	452,538	542,726	687,724	486,861	242,408	320,449	E&D Capex	102-7
Acquisitions: \$M	315,438	36,689	601,865	28,897	98,524	27,637		102-7
Cash dividends per share	2.28	2.40	2.58	2.58	2.58	2.58		102-7
Dividends as % of fund flows from operations, gross	40%	36%	34%	55%	59%	52%		102-7
Dividends as % of fund flows from operations, net	27%	26%	24%	25%	21%	33%		102-7
Long term debt: \$M	642,022	990,024	1,238,080	1,162,998	1,362,192	1,270,330		102-7
Total shareholders' equity: \$M	1,418,646	1,716,375	2,021,346	1,858,659	1,578,463	1,542,886		102-7
Total assets: \$M	3,076,257	3,708,719	4,386,091	4,209,220	4,087,184	3,974,965		102-7
Total annual shareholder return	19.6%	24.6%	-4.4%	-29.5%	57.1%	-14.6%		102-7
OPERATIONS AND RESERVES								
Number of operations (operated business units)	4	4	5	5	5	7	Ireland is non-operated	102-7
Production – total: boe/d	37,803	41,005	49,573	54,922	63,526	68,021		G4-9
Production – crude oil: bbls/d	23,971	25,741	28,879	28,502	27,852	27,721		G4-9
Production - NGLs: bbls/d	1,299	1,730	2,533	4,214	2,582	4,194		G4-9
Production – natural gas: mcf/d	75,200	81,210	108,850	133,240	198,550	217		G4-9
Total proved + probable reserves, gross: mboe	143,695	174,453	212,518	227,102	290,122	298,490	2012-3: Cda, FR, NL, AUS; 2014-5: Adds US; 2016+: all BUs	OG1

MATERIAL TOPIC	2012	2013	2014	2015	2016	2017	Context	GRI
COMMUNITY INVESTMENT								
Community investment total: a+b below (\$ thousands)	718	1,076	1,345	1,048	1,392	1,470		102-7
Canada	531	801	919	722	947	852	Includes corporate program costs	102-7
France	117	188	189	158	109	187		102-7
Netherlands	41	29	114	89	225	315		102-7
Germany				-	9	2		102-7
Ireland				-	-			102-7
Central & Eastern Europe						3		102-7
Australia	29	58	124	65	95	101		102-7
United States			-	14	7	10		102-7
COMMUNITY IMPACT								
Operations with local community engagment programs: %	100	100	100	100	100	100	All Business Units	413-1
Total community impact for non-profits or charities: a+b+c below \$	964,173	1,310,226	1,624,122	1,348,415	1,530,016	1,808,291	300 community groups supported	413-1
a. Direct company-driven donations: \$	553,733	860,708	1,063,220	789,688	1,040,189	1,056,694	Based on LBG circles of corporate giving	413-1
b. Additional direct support (e.g. in kind, employee hours, volunteer grants): \$	163,862	214,738	282,244	258,117	352,132	413,568		413-1
c. External resources leveraged (e.g. staff, government matching): \$	246,578	234,780	278,659	300,610	137,695	338,029		413-1
Other community investment (e.g. private-public partnerships) : \$	70,000	140,000	44,100	-	-	-	Road safety - Parentis roundabout	413-1
Employee Volunteering Outside Working Hours								413-1
Employee volunteer grant program: Vermilion donations \$	14,500	22,358	46,188	40,138	58,855	77,572	Paid only to non-profit/charitable organizations	413-1
Employee volunteer grant program: Employee hours	1,392	4,831	8,875	9,079	11,714	15,252		413-1
Employee Volunteering During Working Hours								
Days of Caring: # of events	N/T	N/T	N/T	N/T	N/T	26		413-1
Days of Caring: Employee hours	1,000	1,179	2,128	1,995	2,135	1,932		413-1
Days of Caring: # of individuals supported	N/T	N/T	N/T	N/T	N/T	55,755		413-1
Days of Caring: \$ in cost savings to community organizations	N/T	N/T	N/T	N/T	N/T	38,000		413-1

MATERIAL TOPIC	2012	2013	2014	2015	2016	2017	Context	GRI
GOVERNANCE								
Ratio of annual total compensation of highest-paid individual to median annual total compensation all permanent employees	17.51	24.88	26.92	26.83	24.69	25.46	Compensation includes base salary, bonus, Vermilion Incentive Plan, and allowances (e.g., holiday pay) CEO only: not broken down by highest paid individual per country due to privacy regulations	102-38
Ratio of % change in CEO compensation to % change in employee median compensation	n/a	13:1	4:1	1:1	-16:1	2:1		102-39
ETHICS								
Requests for advice on ethical behaviour via corporate secretary	0	0	0	0	0	0		102-17
Total number of concerns expressed via whistleblower line	0	0	0	0	0	1	Investigated and resolved as per Fair Culture policy	102-17, 102-34
Incidents of discrimination	0	0	0	0	0	0		406-1
Violations of rights, including those of Indigenous peoples	0	0	0	0	0	0		411-1
Legal actions regarding anti-competitive behaviour	0	0	0	0	0	0		206-1
Monetary value of fines for non-compliance with laws & regulations	0	0	0	0	0	0		206-1, 419-1
Political donations	0	0	0	0	0	0	<a href="#">Also see ESTMA (EITI) report on payments to governments</a>	415-1
Financial Assistance Received from Government: \$	0	0	0	0	0	\$23,000	Canada Alberta Job Grant program reimbursement	201-4
ANTI-CORRUPTION								
Percentage of operations assessed for risks related to corruption	100	100	100	100	100	100		205-1
% of governance body communicated to on anti-corruption	100	100	100	100	100	100	Annual conduct policy acknowledgement required	205-2a
# of employees communicated to on anti-corruption	366	437	535	520	492	506	Annual conduct policy acknowledgement required	205-2b
% of employees communicated to on anti-corruption	100	100	100	100	97	100	Regional breakdown not required due to high coverage	205-2b
# of contractors communicated to on anti-corruption	N/T	N/T	N/T	N/T	156	179	Annual conduct policy acknowledgement required	205-2b
% of contractors communicated to on anti-corruption	N/T	N/T	N/T	N/T	99	100	Regional breakdown not required due to high coverage	205-2b
% of business partners communicated to on anti-corruption	N/T	N/T	N/T	N/T	N/T	100	Business partners defined as joint venture partners	205-2c
# of governance body members trained on anti-corruption	8	8	9	12	11	9		205-2d
% of governance body members trained on anti-corruption	100	100	100	100	100	100		205-2d
# of employees trained on anti-corruption	0	18	18	18	18	66	New employees globally + Business Development + Finance	205-2e
% of employees trained on anti-corruption	0	4	4	4	4	13		205-2e
Confirmed incidents of corruption	0	0	0	0	0	0		206-1

Material Topic	2012	2013	2014	2015	2016	2017	Context	GRI
<b>OVERALL STAFF DEMOGRAPHICS</b>								
<b>Total staff (employees + contractors) (FTEs)</b> Employees = permanent; Contractors = fixed-term contracts	515	597	690	721	661	685		102-7
<b>Staff by employment contract &amp; gender</b>								102-8a
Employees (Male)	241	304	365	356	352	360		
Employees (Female)	136	157	170	164	152	146		
<b>Total Employees</b>	<b>377</b>	<b>461</b>	<b>535</b>	<b>520</b>	<b>504</b>	<b>506</b>		
Contractors (Male)	112	108	124	171	122	124		
Contractors (Female)	26	28	31	30	35	55		
<b>Total Contractors</b>	<b>138</b>	<b>136</b>	<b>155</b>	<b>201</b>	<b>157</b>	<b>179</b>		
<b>Permanent employees by employment type &amp; gender</b>								102-8c
Full-time (Male)	240	303	362	350	343	454		
Full-time (Female)	134	152	163	153	142	175		
Part-time (Male)	1	1	3	6	9	30		
Part-time (Female)	2	5	7	11	10	26		
<b>Staff by region and gender (all staff )</b>								102-8c
Australia - Male	54	62	62	65	63	72		
Australia - Female	9	13	13	15	15	20		
<b>Total Australia</b>	<b>63</b>	<b>75</b>	<b>75</b>	<b>80</b>	<b>78</b>	<b>92</b>		
Canada - Male	143	165	186	177	167	168		
Canada - Female	103	114	118	112	100	102		
<b>Total Canada</b>	<b>246</b>	<b>279</b>	<b>304</b>	<b>289</b>	<b>267</b>	<b>270</b>		
France - Male	109	125	137	152	123	163		
France - Female	41	46	50	47	48	50		
<b>Total France</b>	<b>150</b>	<b>171</b>	<b>187</b>	<b>199</b>	<b>171</b>	<b>166</b>		
Central & Eastern Europe - Male					6	7		
Central & Eastern Europe - Female					1	2		
<b>Total Central &amp; Eastern Europe</b>					<b>7</b>	<b>9</b>		
Germany - Male			5	12	19	31		
Germany - Female			1	1	2	6		
<b>Total Germany</b>			<b>6</b>	<b>13</b>	<b>21</b>	<b>37</b>		
Netherlands - Male	52	65	94	114	91	84		
Netherlands - Female	4	7	16	16	17	16		
<b>Total Netherlands</b>	<b>56</b>	<b>72</b>	<b>110</b>	<b>130</b>	<b>108</b>	<b>100</b>		
United States - Male			5	7	5	6		
United States - Female			3	3	4	5		
<b>Total United States</b>			<b>8</b>	<b>10</b>	<b>9</b>	<b>11</b>		
<b>Percentage of work performed by workers defined as self-employed</b>	<b>27%</b>	<b>23%</b>	<b>7%</b>	<b>6%</b>	<b>6%</b>	<b>5%</b>		102-8d
<b>Significant variations in employment numbers (e.g. seasonal changes)</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>		102-8e
<b>Percentage of employees covered by collective bargaining agreements</b>	<b>29%</b>	<b>29%</b>	<b>27%</b>	<b>28%</b>	<b>28%</b>	<b>31%</b>	Zero sites where collective bargaining is at risk	102-41, 407-1
<b>DETAILED STAFF DEMOGRAPHICS</b>								



Material Topic	2012	2013	2014	2015	2016	2017	Context	GRI
Number of new employee hires by age group, gender and region							2014: FTE=1 permanent new hires, including conversions from contingent workers. 2015+: FTE=1, 0.8 or 0.9 permanent new hires, including conversions from contingent workers.	401-1
Australia: Male Under 30	1	2	8	0	0	0		
Australia: Female Under 30	0	0	0	0	0	0		
Australia: Male 30-50	3	3	3	0	0	0		
Australia: Female 30-50	0	0	0	0	0	0		
Australia: Male Over 50	1	0	2	0	0	0		
Australia: Female Over 50	0	0	0	0	0	0		
Canada: Male Under 30	3	6	13	1	0	3		
Canada: Female Under 30	2	5	5	1	3	1		
Canada: Male 30-50	13	23	22	2	0	7		
Canada: Female 30-50	8	15	11	4	6	3		
Canada: Male Over 50	4	4	5	2	1	0		
Canada: Female Over 50	5	4	9	1	0	1		
Central & Eastern Europe: Male Under 30					0	1		
Central & Eastern Europe: Female Under 30					0	0		
Central & Eastern Europe: Male 30-50					0	0		
Central & Eastern Europe: Female 30-50					1	1		
Central & Eastern Europe: Male Over 50					0	0		
Central & Eastern Europe: Female Over 50					0	0		
France: Male Under 30	2	9	4	0	3	3		
France: Female Under 30	0	3	4	0	0	0		
France: Male 30-50	1	17	13	0	0	3		
France: Female 30-50	0	5	4	1	0	1		
France: Male Over 50	1	1	1	0	0	1		
France: Female Over 50	0	0	0	0	0	0		
Germany: Male Under 30			0	0	0	1		
Germany: Female Under 30			0	0	1	0		
Germany: Male 30-50			1	3	0	7		
Germany: Female 30-50			1	0	1	1		
Germany: Male Over 50			0	0	1	6		
Germany: Female Over 50			0	0	0	0		
Netherlands: Male Under 30	0	2	3	0	0	2		
Netherlands: Female Under 30	0	2	1	0	0	0		
Netherlands: Male 30-50	2	15	8	2	0	3		
Netherlands: Female 30-50	0	0	3	2	3	0		
Netherlands: Male Over 50	1	2	6	1	0	2		
Netherlands: Female Over 50	0	0	1	0	0	0		
United States: Male Under 30			0	0	0	0		
United States: Female Under 30			0	0	1	0		
United States: Male 30-50			2	3	0	1		
United States: Female 30-50			1	0	0	0		
United States: Male Over 50			3	0	0	0		

Material Topic	2012	2013	2014	2015	2016	2017	Context	GRI
United States: Female Over 50			2	0	0	0		
Rate of new employee hires by age group, gender and region							2017+: new hires/avg total employees	401-1
Australia: Male Under 30	33%	40%	70%	0%	0%	0%	0	
Australia: Female Under 30	0%	0%	0%	0%	0%	0%	0	
Australia: Male 30-50	19%	18%	11%	0%	0%	0%	0	
Australia: Female 30-50	0%	0%	0%	0%	0%	0%	0	
Australia: Male Over 50	90%	0%	10%	0%	0%	0%	0	
Australia: Female Over 50	0%	0%	0%	0%	0%	0%	0	
Canada: Male Under 30	38%	38%	58%	0%	0%	1%	3	
Canada: Female Under 30	22%	36%	36%	0%	43%	0%	1	
Canada: Male 30-50	17%	25%	20%	2%	0%	1%	7	
Canada: Female 30-50	14%	21%	17%	7%	11%	1%	3	
Canada: Male Over 50	13%	11%	13%	6%	4%	0%	0	
Canada: Female Over 50	16%	12%	29%	3%	0%	0%	1	
Central & Eastern Europe: Male Under 30						0%	1	
Central & Eastern Europe: Female Under 30						0%	0	
Central & Eastern Europe: Male 30-50						0%	0	
Central & Eastern Europe: Female 30-50					100%	0%	1	
Central & Eastern Europe: Male Over 50						0%	0	
Central & Eastern Europe: Female Over 50					0	0		
France: Male Under 30	18%	45%	17%	0%	17%	1%	3	
France: Female Under 30	0%	43%	36%	0%	0%	0%	0	
France: Male 30-50	30%	34%	21%	0%	0%	1%	3	
France: Female 30-50	0%	19%	14%	3%	0%	0%	1	
France: Male Over 50	30%	30%	2%	0%	0%	0%	1	
France: Female Over 50	0%	19%	0%	0%	0%	0%	0	
Germany: Male Under 30			0%	NA	0%	0%	1	
Germany: Female Under 30			0%	NA	100%	0%	0	
Germany: Male 30-50			13%	60%	0%	1%	7	
Germany: Female 30-50			50%	0%	67%	0%	1	
Germany: Male Over 50			0%	NA	200%	1%	6	
Germany: Female Over 50			0%	NA	0%	0%	0	
Netherlands: Male Under 30	0%	10%	50%	0%	0%	0%	2	
Netherlands: Female Under 30	0%	0%	25%	0%	0%	0%	0	
Netherlands: Male 30-50	14%	56%	20%	6%	0%	1%	3	
Netherlands: Female 30-50	0%	0%	150%	29%	200%	0%	0	
Netherlands: Male Over 50	30%	25%	32%	7%	0%	0%	2	
Netherlands: Female Over 50	0%	0%	40%	0%	0%	0%	0	
United States: Male Under 30			0%	NA	0%	0%	0	
United States: Female Under 30			0%	NA	100%	0%	0	
United States: Male 30-50			200%	100%	0%	0%	1	
United States: Female 30-50			200%	0%	0%	0%	0	
United States: Male Over 50			200%	0%	0%	0%	0	
United States: Female Over 50			200%	0%	0%	0%	0	
Employee turnover numbers by age group, gender and region								401-1

Material Topic	2012	2013	2014	2015	2016	2017	Context	GRI
Australia: Male Under 30	0	0	2	0	0	0		
Australia: Female Under 30	0	0	0	0	0	0		
Australia: Male 30-50	1	5	1	1	0	0		
Australia: Female 30-50	0	0	0	0	0	1		
Australia: Male Over 50	0	1	1	2	0	1		
Australia: Female Over 50	0	0	0	0	0	0		
Canada: Male Under 30	0	3	2	3	1	2		
Canada: Female Under 30	2	1	1	3	0	1		
Canada: Male 30-50	10	6	3	6	3	8		
Canada: Female 30-50	5	8	4	7	7	5		
Canada: Male Over 50	4	1	1	8	8	1		
Canada: Female Over 50	3	10	2	5	6	4		
Central & Eastern Europe: Male Under 30					0	0		
Central & Eastern Europe: Female Under 30					0	0		
Central & Eastern Europe: Male 30-50					0	0		
Central & Eastern Europe: Female 30-50					0	0		
Central & Eastern Europe: Male Over 50					0	0		
Central & Eastern Europe: Female Over 50					0	0		
France: Male Under 30	0	1	1	0	0	0		
France: Female Under 30	0	0	1	0	0	0		
France: Male 30-50	2	5	1	0	1	1		
France: Female 30-50	0	1	0	0	0	0		
France: Male Over 50	2	4	2	3	1	10		
France: Female Over 50	0	0	0	1	0	0		
Germany: Male Under 30				0	0	0		
Germany: Female Under 30				0	0	0		
Germany: Male 30-50				0	0	2		
Germany: Female 30-50				0	0	1		
Germany: Male Over 50				0	0	0		
Germany: Female Over 50				0	0	0		
Netherlands: Male Under 30	1	0	0	0	0	0		
Netherlands: Female Under 30	0	0	0	0	0	0		
Netherlands: Male 30-50	0	0	3	2	5	4		
Netherlands: Female 30-50	0	0	1	0	2	1		
Netherlands: Male Over 50	2	0	1	0	2	1		
Netherlands: Female Over 50	0	0	0	0	0	0		
United States: Male Under 30				0	0	0		
United States: Female Under 30				0	0	0		
United States: Male 30-50				0	1	0		
United States: Female 30-50				0	0	0		
United States: Male Over 50				0	0	1		
United States: Female Over 50				0	0	0		
Employee turnover rate by age group, gender and region (percent)							For 2017+, we changed our definition to align with GRI Standards, calculating this as turnover in the category/ total # of employees	401-1

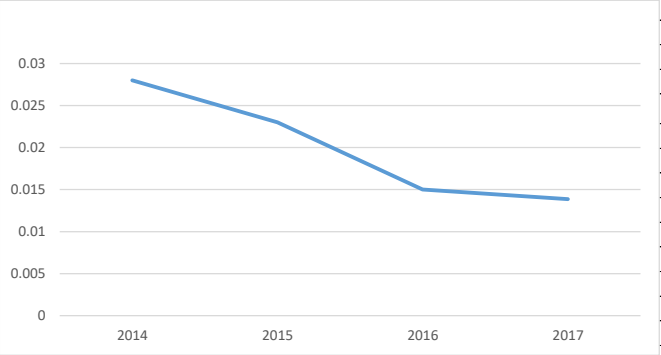
Material Topic	2012	2013	2014	2015	2016	2017	Context	GRI
Australia: Male Under 30	0	0	40%	0%	0%	0.0%		
Australia: Female Under 30	0	0	0%	NA	0%	0.0%		
Australia: Male 30-50	7	30	6%	5%	0%	0.0%		
Australia: Female 30-50	0	0	0%	0%	0%	0.2%		
Australia: Male Over 50	0	9	10%	20%	0%	0.2%		
Australia: Female Over 50	0	0	0%	0%	0%	0.0%		
Canada: Male Under 30	0	25	12%	16%	7%	0.4%		
Canada: Female Under 30	21	9	10%	32%	0%	0.2%		
Canada: Male 30-50	13	7	3%	6%	7%	1.6%		
Canada: Female 30-50	9	13	7%	12%	13%	1.0%		
Canada: Male Over 50	13	3	3%	25%	28%	0.2%		
Canada: Female Over 50	10	31	7%	14%	20%	0.8%		
Central & Eastern Europe: Male Under 30					0	0.0%		
Central & Eastern Europe: Female Under 30					0	0.0%		
Central & Eastern Europe: Male 30-50					0	0.0%		
Central & Eastern Europe: Female 30-50					0	0.0%		
Central & Eastern Europe: Male Over 50					0	0.0%		
Central & Eastern Europe: Female Over 50					0	0.0%		
France: Male Under 30	0	6	5%	0%	0%	0.0%		
France: Female Under 30	0	0	14%	0%	0%	0.0%		
France: Male 30-50	5	12	2%	0%	2%	0.2%		
France: Female 30-50	0	4	0%	0%	0%	0.0%		
France: Male Over 50	6	11	6%	9%	3%	2.0%		
France: Female Over 50	0	0	0%	14%	0%	0.0%		
Germany: Male Under 30				NA	0%	0.0%		
Germany: Female Under 30				NA	0%	0.0%		
Germany: Male 30-50				0%	0%	0.4%		
Germany: Female 30-50				0%	0%	0.2%		
Germany: Male Over 50				NA	0%	0.0%		
Germany: Female Over 50				NA	0%	0.0%		
Netherlands: Male Under 30	0	0	0%	0%	0%	0.0%		
Netherlands: Female Under 30	0	0	0%	0%	0%	0.0%		
Netherlands: Male 30-50	0	0	13%	6%	16%	0.8%		
Netherlands: Female 30-50	0	0	50%	0%	67%	0.2%		
Netherlands: Male Over 50	44	0	12%	0%	14%	0.2%		
Netherlands: Female Over 50	0	0	0%	0%	0%	0.0%		
United States: Male Under 30				NA	0%	0.0%		
United States: Female Under 30				NA	0%	0.0%		
United States: Male 30-50				0%	3%	0.0%		
United States: Female 30-50				0%	0%	0.0%		
United States: Male Over 50				0%	0%	0.2%		
United States: Female Over 50				0%	0%	0.0%		
<b>Total Global Turnover Rate</b>			<b>5.3%</b>	<b>8.0%</b>	<b>7.2%</b>	<b>8.7%</b>		
<b>Net employment creation, permanent employees</b>	<b>15</b>	<b>72</b>	<b>109</b>	<b>-18</b>	<b>-16</b>	<b>4</b>		401-1

Material Topic	2012	2013	2014	2015	2016	2017	Context	GRI
PARENTAL LEAVE								
Parental Leave (includes maternity, paternity and parental leaves)							All Vermilion employees who experience the birth or adoption of a child are eligible for maternity, paternity and parental leave in accordance with local legislation	401-3
Proportion of male employees entitled to parental leave	100	100	100	100	100	100		
Proportion of female employees entitled to parental leave	100	100	100	100	100	100		
Total proportion of employees entitled to parental leave %	100	100	100	100	100	100		
Number of male employees who took parental leave	1	1	6	5	7	7		
Number of female employees who took parental leave	4	9	16	4	5	6		
Total number of employees who took parental leave	5	10	22	9	12	13		
Number of male employees returned after parental leave	1	1	6	5	7	7		
Number of female employees returned after parental leave	3	9	9	6	5	5		
Total number of employees returned after parental leave	4	10	15	11	12	12		
Rate of male employees who returned after parental leave	100%	100%	100%	100%	100%	100%		
Rate of female employees who returned after parental leave	75%	100%	56%	100%	100%	83%		
Retention: # of male employees 12 months after parental leave					5	6	Based on employees returned in previous year	
Retention: # of female employees 12 months after parental leave					5	2	Based on employees returned in previous year	
12-month retention rate: male employees					100%	86%		
12-month retention rate: female employees					100%	66%		
United States - Male	NA	NA	NA	NA				
United States - Female	NA	NA	NA	NA				
TRAINING AND EDUCATION - PERMANENT EMPLOYEES								404-1
Hours of Training - Male	3,419	4,297	12,074	6,054	7,363	6,888		
Hours of Training - Female	2,471	3,447	3,918	1,823	1,550	1,638		
Total Hours of Training - Employees	5,891	7,744	15,992	7,877	8,913	8,526		
Average Hours of Training per employee - Male	14	14	33	17	21	19		
Average Hours of Training per employee - Female	18	22	23	11	10	11		
Average Hours of Training - Employees	16	17	30	15	18	17		
Administration Staff Hours of Training - Male	940	1,051	1,156	479	575	391		
Administration Staff Hours of Training - Female	1,632	2,206	2,873	1,362	900	877		
Production Staff Hours of Training - Male	2,480	3,246	10,919	5,575	6,787	6,497		
Production Staff Hours of Training - Female	839	1,241	1,045	462	650	391		
Administration Staff Average Hours of Training - Male	17	5	17	18	8	5	2014 and 2015: per employee trained	
Administration Staff Average Hours of Training - Female	20	37	22	18	8	8	2016+: per employee total	
Production Staff Average Hours of Training - Male	34	13	32	36	24	23		
Production Staff Average Hours of Training - Female	10	23	26	23	20	24		
PERFORMANCE AND CAREER DEVELOPMENT - PERMANENT EMPLOYEES								404-3
Male employees with annual performance/career review			93%	94%	95%	95%		
Female employees with annual performance/career review			94%	97%	90%	94%		
Total employees with annual performance/career review		44%	93%	95%	93%	92%		
DEFINED BENEFIT PENSION PLAN - NETHERLANDS								201-3

Material Topic	2012	2013	2014	2015	2016	2017	Context	GRI
Level of coverage of the fund’s assets compared to obligations	100%	100%	100%	100%	100%	100%		
Percentage of salary contributed by employee	6%	6%	6%	6%	6%	6%		
Contribution of employer: Vermilion pays an annual premium based on gender, age, salary and future working years.	Premium	Premium	Premium	Premium	Premium	Premium		
Rate of participation in defined benefit pension plan - NL	0%	0%	0%	10%	27%	38%	Defined benefit plan began in 2015	
Rate of participation in defined contribution pension plan - NL	100%	100%	100%	90%	73%	62%		

Material Topic	2012				2013				2014				2015				2016				2017				Context				GRI	
OCCUPATIONAL HEALTH AND SAFETY																													GRI	
Number of workers represented by HSE committees		515				597				690				721				661				685			All OH&S metrics report male and female statistics together				413-1	
% of workers represented by HSE committees		100				100				100				100				100				100							413-1	
Workers with high risk of occupation-related disease		0				0				0				0				0				0							403-3	
TRIFR - STAFF AND INDEPENDENT CONTRACTORS																														
Total recordable injury frequency per 200,000 hours		0.97				1.09				1.46				0.98				1.07				1.27							403-2	
Total recordable injury frequency per 1,000,000 hours		N/T				N/T				7.3				4.9				5.33				5.69							403-2	
INJURY RATES, STAFF (PERMANENT & FIXED TERM)																														
Types of injury – all staff (permanent and fixed term)	LT	RW	MA	Total	LT	RW	MA	Total	LT	RW	MA	Total	LT	RW	MA	Total	F	LT	RW	MW	Total	F	LT	RW	MA	Total	F Fatality LT Lost time RW Restricted Work MW Medical Aid	403-2		
Canada	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	GRI Lost Day Rate replaced by industry standard Lost Time Rate		
France	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1			
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Australia	0	0	0	0	0	0	1	1	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
United States									0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Germany																					0	0	1	1	2					
Injury rate – all staff				N/T				N/T				0.000009				0				0.0000010				0.0000020	Injuries relative to total workforce hours				403-2	
Canada				0.0000012				0.0000032				0.0000019				0				0.0000021				0						
France				0				0.0000085				0				0				0				0						
Netherlands				0				0				0				0				0				0						
Australia				0				0.0000072				0.0000140				0				0				0.0000150						
United States													0				0				0				0					
Germany																									0.0000217					
LTIFR - all staff, per 1 million hours worked				N/T				N/T				1.84				0.00				0.00				1.01					403-2	
TRIF - all staff, per 1 million hours worked				N/T				N/T				2.77				0.00				1.01				4.05						
Total Workforce Hours, all staff				N/T				N/T				1,084,145				869,750				993,804				987,115					403-2	
Canada																510,232				483,968				463,752						
France																122,968				295,988				271,902						
Netherlands																110,118				123,808				121,016						
Australia																107,752				72,080				66,456						
United States																	18,680				17,960				18,000					
Germany																									45,989					
Absentee rate – all staff				N/T				0.5				0.3				0.7				0.03				0.01	2012-2015: staff on long-term disability divided by total staff 2016: data improvement: absentee days due to S&LTD and sick leave divided by total days available for all permanent staff				403-2	
INJURY RATES, INDEPENDENT CONTRACTORS/VENDORS				2012				2013				2014				2015				2016				2017						
Types of injury - independent contractors	LT	RW	MA	Total	LT	RW	MA	Total	LT	RW	MA	Total	LT	RW	MA	Total	F	LT	RW	MA	Total	F	LT	RW	MA	Total	F Fatality LT Lost time RW Restricted Work MW Medical Aid	403-2		
Canada	3	1	6	10	2	1	5	8	4	4	5	13	0	3	3	6	0	0	2	0	2	0	2	5	4	11	GRI Lost Day Rate replaced by industry standard Lost Time Rate			
France	0	1	1	2	1	0	1	2	5	1	1	7	3	1	1	5	1	1	0	1	3	0	2	1	0	3				
Netherlands	0	1	1	2	0	3	0	3	1	2	1	4	0	1	1	2	0	2	1	3	6	0	0	0	0	0				
Australia	0	0	0	0	1	1	1	3	0	0	2	2	2	0	0	2	0	0	0	0	0	0	0	0	2	2				
United States													0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Germany																					0	0	1	0	1					
Injury rate – independent contractors				N/T				N/T				0.0000090				0.0000069				0.0000087				0.0000085	Injuries relative to total independent contractor hours				403-2	
Canada				0.0000065				0.0000044				0.0000072				0.0000052				0.0000043				0.0000109						
France				0.0000040				0.0000038				0.0000092				0.0000087				0.0000065				0.0000050						
Netherlands				0.0000151				0.0000228				0.0000155				0.0000077				0.0000292				0						
Australia				0				0.0000364				0.0000486				0.0000171				0				0.0000366						
United States													0				0				0				0					
Germany																									0.0000095					
LTIFR - independent contractors: per 1 million hours worked				N/T				N/T				3.47				2.29				3.18				2.00						
TRIFR - independent contractors: per 1 million hours worked				N/T				N/T				9.03				6.87				8.74				8.49						
Contractors Hours Worked				N/T				N/T				2,879,054				2,184,682				1,259,127				2,002,542					403-2	
Canada												1,813,901				1,163,403				466,631				1,008,836						
France												764,845				575,000				461,500				600,819						
Netherlands												257,798				258,189				205,377				121,805						
Australia												41,184				117,020				47,604				54,648						
United States													1,326				71,070				78,015				110,974					
Germany																									105,460					
Absentee rate – independent contractors				N/T				N/T				N/T				N/T				N/T				N/T	Current system does not track absentee days for independent contractors, so this figure cannot be calculated				403-2	

MATERIAL TOPIC	2012	2013	2014	2015	2016	2017	CONTEXT	GRI								
ENERGY																
Scope 1: Energy consumption within organization, non-renewable (natural gas, propane liquid, diesel fuel and vehicle fuel): GJ	2,724,115	2,758,361	3,012,091	2,970,235	2,869,053	2,975,227		302-1								
Canada	1,897,339	1,977,236	2,130,186	2,022,377	1,939,422	1,929,996										
France	7,062	26,016	35,351	19,925	25,136	20,583										
Netherlands	31,897	31,248	33,842	14,148	50,336	77,023										
Australia	787,817	723,861	811,060	793,525	743,563	812,226										
United States			1,652	120,259	110,596	114,077										
Germany						21,323										
Scope 2: Energy consumption outside organization, non-renewable (electricity): GJ	1,011,274	972,957	1,022,429	1,198,584	858,091	833,841	1 MWh = 3.6 GJ	302-2								
Canada	169,481	169,481	181,438	223,557	238,787	232,346										
France	531,306	562,861	551,298	656,877	606,370	581,926										
Netherlands	309,845	239,742	287,681	313,423	8,590	0	Purchase of Guarantees of Origin of green electricity at 105% of our consumption									
Australia	642	867	695.04	772	787	727										
United States			1317.35	3,955	3,556	4,229										
Germany						14,612										
Energy intensity ratio Scope 1+2: GJ/boe	0.34	0.32	0.22	0.21	0.16	0.15		302-3								
Renewable energy	2012	2013	2014	2015	2016	2017										
Total amount invested in renewable energy, CND \$	\$140,000	\$140,000	\$147,000	\$42,600	\$434,385	\$446,385		OG2								
Canada	\$0	\$0	\$0	\$0	\$0	\$0										
France	\$140,000	\$140,000	\$0	0	\$0	\$12,000										
Netherlands	\$0	\$0	\$147,000	\$42,600	\$434,385	\$434,385										
Australia	\$0	\$0	\$0	0	\$0	\$0										
United States				0	\$0	\$0										
Germany						\$0										
Renewable energy investment: % of capital expenditure	0.03	0.03	0.02	0.01	0.02	1.4	*Capex 2012 = \$453MM *Capex 2013 = \$543MM *Capex 2014 = \$688MM *Capex 2015 = \$487MM *Capex 2016 = 242MM *Capex 2017 = \$320MM	OG2								
Renewable energy GHG emissions avoided: tCO2e	125,000	125,000	125,000	125,000	125,000	125,000	Parentis tomato greenhouse: based on 10,000 tonnes of CO2e/yr not generated, assuming electricity use for heating, using a France Grid Intensity Factor of 0.08 kg CO2/kWh	OG3, OG4, OG5								
Renewable energy generated by source (actual energy content transferred): MWh	31,380	31,380	31,380	31,380	32,800	70,080										
Canada	0	0	0	0	0	0										
France	31,380	31,380	31,380	31,380	32,800	70,080	2012-2014 restated to reflect greenhouse geothermal development in 2009									
Netherlands	0	0	0	0	0	0										
Australia	0	0	0	0	0	0										
United States				0	0	0										
Germany						0										
EMISSIONS	2012	2013	2014	2015	2016	2017		GRI								
Scope 1 gross direct GHG emissions: tonne	288,781	310,285	511,213	441,193	355,746	344,186	Based on operational control and equity	305-1								
CO <sub>2</sub> Scope 1 emissions (excluding CH4 and N2O): tonne	250,063	259,849	442,839	348,002	283,618	278,143	Hydrofluorocarbons, Perfluorocarbons, Sulfur hexafluoride, VOCs, particulates not tracked	305-1, SS								
Canada			310,306	202,942	126,429	133,430										
France			57,374	48,525	50,238	63,197	Increase due to improved measurement & decrease in customer need for gas									
Netherlands			27,871	43,058	52,159	23,954										
Australia			45,822	46,013	40,783	42,409					2014	0.028				
United States			1,466	7,464	14,009	13,693					2015	0.023				
Germany						1,460					2016	0.015				
Methane: tCO2e	38,718	50,436	68,174	92,927	71,890	65,782		SS			2017	0.014				
Canada	38,718	50,436	16,274	52,975	32,948	30,847										
France			12,865	12,852	10,565	9,236	More gas is being flared via incinerator than flare: 99.9% combustion efficiency vs 98%									
Netherlands			22,233	9,436	10,419	8,315										
Australia			16,727	17,294	16,959	13,611										
United States			74	371	998	370										
Germany						3,403										
Nitrous Oxide (N <sub>2</sub> O): tCO2e	Not tracked	Not tracked	201	263	237	260		SS								
Canada	Not tracked	Not tracked	0	50	50	99										
France	Not tracked	Not tracked	109	118	113	102	More gas is being flared via incinerator than flare: 99.9% combustion efficiency vs 98%									
Netherlands	Not tracked	Not tracked	0	0	0	0										
Australia	Not tracked	Not tracked	92	96	66	57										
United States	Not tracked	Not tracked	0	0	7	1										
Germany						1										
Scope 1 GHG emissions intensity, oil and gas production	0.0209	0.0207	0.028	0.023	0.015	0.014	tCO2e per barrel of oil equivalent	305-4								
Scope 2 gross indirect GHG emissions: tCO2e	85,223	79,309	73,410	96,600	69,318	60,904		305-2								
Canada			41,007	48,900	60,064	55,088										
France			12,251	7,619	7,560	8,959	Change associated with change in grid mix intensity									
Netherlands			19,908	39,631	1,271	(4,328)	Purchase of Guarantees of Origin of green electitricity in excess of our consumption									
Australia			151	163	166	141										
United States			93	288	257	308										
Germany						735										





Scope 2 GHG emissions intensity: tCO2e per boe	0.0062	0.0053	0.004	0.005	0.003	0.002		305-5									
Scope 3 Gross other indirect GHG emissions: tCO2e	2,839	9,860	2,997,538	7,858,296	7,697,489	8,393,391	Increasing sophistication of calculation methodology & reporting	305-3									
Biogenic CO2 Scope 3 emissions	0	0	0	0	0	0		305-3									
Estimated Scope 3 associated with product end use: tCO2e	Not tracked	Not tracked	2,250,071	7,160,865	7,010,867	7,674,486		SS									
Emissions of ozone-depleting substances	0	0	0	0	0	0		305-6									
NOx			2,847	0	20	26		305-7									
Canada			1,971	Not Tracked	Not Tracked	Not Tracked											
France			876	Not Tracked	15	18											
Netherlands			0	Not Tracked	6	7											
Australia			0	Not Tracked	0	0											
United States			0	Not Tracked	0	0											
Germany						0.0											
SO2			2847	544	675	675		305-7									
Canada			1971	181	364	166											
France			876	363	300	509											
Netherlands			0	0	0	0											
Australia			0	0	0	0											
United States			0	0	10	0											
Germany						0											
FLARING AND VENTING	2012	2013	2014	2015	2016	2017											
Volume of flared hydrocarbon: e3m3	15,032.79	17,891.39	71,683	54,405	29,266	35,920	Note that all flared volumes are reported, not just continous flares.	OG6									
Canada	2,173	3,137	46,885	35,000	8,168	12,023	Result from increased development activity (Significant increase in AB flaring).	OG6									
France	11,347	14,108	22,284	17,472	16,564	21,492	Increase due to improved measurement & decrease in customer need for gas	OG6									
Netherlands	779	354	1,771	371	344	472		OG6									
Australia	734	293	513	442	263	309		OG6									
United States			230	1,119	3,927	1,561		OG6									
Germany						64											
Volume of continuously vented hydrocarbon: e3m3	2,862	3,818	3,583	3,714	2,941	5,961		OG6									
Canada	864	1,069	1,156	1,007	645	648		OG6									
France	100	953	963	1,185	840	773		OG6									
Netherlands	732	709	381	303	196	194		OG6									
Australia	1,166	1,088	796	1,197	1,180	919		OG6									
United States			286	23	79	9											
Germany						3,417											
Flaring/Venting Intensity based on production: e3m3/BOE	0.0013	0.0015	0.0042	0.0029	0.0014	0.0017		OG6									
WATER	2012	2013	2014	2015	2016	2017		GRI									
Total water withdrawal by source: m3	996,415	819,523	1,091,587	881,029	758,560	821,247	Vermilion reports the production and re-use of produced water separate from total water withdrawn from other sources, as we use produced water to support continued production	303-1									
Canada			227,323	92,044	30,835	81,511	Increase in development activity										
France			681,734	563,201	478,374	504,083											
Netherlands			30	0	20,145	29,874											
Australia			182,500	207,500	207,500	182,500											
United States			0	18,284	21,706	23,255											
Germany						23											
Surface water, including wetlands, rivers, lakes, oceans: m3	348,961	313,262	302,053	233,165	223,221	194,589		303-1									
Canada			119,553	25,665	6,659	12,089											
France			0	0	0	0											
Netherlands			0	0	0	0											
Australia			182,500	207,500	207,500	182,500											
United States			0	0	9,062	0											
Germany						0											
Groundwater: m3	640,854	490,410	755,873	630,537	499,671	591,223		303-1									
Canada			101,401	61,858	23,967	62,369											
France			654,442	550,395	463,152	493,820											
Netherlands			30	0	30	12,315											
Australia			0	0	0	0											
United States			0	18,284	12,522	22,718											
Germany						0											
Municipal water supplies or other water utilities: m3	6,600	15,851	33,661	14,455	35,669	17,876		303-1									
Canada			6,369	1,649	210	7,053											
France			27,292	12,806	15,222	10,263											
Netherlands			0	0	20,115	0											
Australia			0	0	0	0											
United States			0	0	122	537											

Germany						23													
Water sources significantly affected by water withdrawal	0	0	0	0	0	0		303-2											
Water withdrawn in water stressed or water limited areas	0	0	0	0	0	0		303-2											
Water recycled and reused = reduction in water use: m3	0	7,400	21,934	2,872	16,016	35,046	Does not include produced water reused or recycled	303-2											
Canada			21,934	2,872	0	0													
France			0	0	0	0													
Netherlands			0	0	16,016	35,046													
Australia			0	0	0	0													
United States			0	0	0	0													
Germany						0													
Water recycled and reused: %	0	0.90%	2%	0.3%	2%	4%		303-3											
Canada				0.03	0	0													
France				0	0	0													
Netherlands				0	0.03	1.17													
Australia				0	0	0													
United States				0	0	0													
Germany						0													
WATER DISCHARGE AND PRODUCED WATER	2012	2013	2014	2015	2016	2017													
Total water discharge by quality and destination, m3	275,299	7,665,326	7,776,122	8,212,284	8,364,747	8,268,675		306-1											
Canada			95,661	33,616	104	115													
France			1,596	454	143	116													
Netherlands			5,835	3,274	6,830	51,286													
Australia		7,530,821	7,673,030	8,156,657	8,343,820	8,217,158	Produced water (see below, 33% of total produced water), within operating approvals												
United States			0	18,284	13,850	0													
Germany						0													
Water bodies significantly affected by discharges of water	0	0	0	0	0	0		306-5											
Total volume of produced water, m3	1,559,854	1,599,692	23,156,436	24,457,667	24,545,576	25,059,159	33%	OG5											
Canada		1,599,692	2,040,024	2,524,903	2,305,947	2,359,192													
France		Not tracked	13,414,954	13,605,896	13,814,729	13,902,601													
Netherlands		Not tracked	12,736	100,598	16,628	11,128													
Australia		7,530,821	7,673,030	8,156,657	8,343,820	8,217,158													
United States			15,692	69,612	64,452	66,687													
Germany						502,393													
Volume and % of produced water by disposal method:								OG5											
Reused: % and volume	0	0	0	0	0	0		OG5											
Recycled: %			0.02%	0.06%	0.04%	0.03%													
Recycled - volume: m3	0	0	5,096	15,076	9,519	7,065		OG5											
Canada	0	0	5,096	15,076	0	0													
France	0	0	0	0	0	0													
Netherlands	0	0	0	0	9,519	7,065													
Australia	0	0	0	0	0	0													
United States			0	0	0	0													
Germany						0													
Reinjected: %	100	100	67%	67%	66%	67%													
Reinjected: m3	1,559,854	1,599,692	15,478,310	16,285,934	16,195,170	16,796,476		OG5											
Canada	1,559,854	1,599,692	2,040,024	2,524,903	2,308,880	2,338,141													
France			13,414,954	13,605,896	13,814,729	13,902,601													
Netherlands			7,640	85,522	7,109	4,062													
Australia			0	0	0	0													
United States			15,692	69,612	64,452	49,279													
Germany						502,393													
Hydrocarbon discharged within produced water: tonnes	242	244	113	110	104	115		OG5											
Canada			0	0	0	0		OG6											
France			0	0	0	0		OG6											
Netherlands			0	0	0	0		OG6											
Australia			113	110	104	115	Released within our operating approval volume	OG6											
United States			0	0	0	0		OG6											
Germany						0													
ASSET INTEGRITY AND PROCESS SAFETY	2012	2013	2014	2015	2016	2017	OG13												
Number of Tier 1 process safety events	0	0	0	0	0	0		OG13											
Number of Tier 2 process safety events	13	27	36	78	42	69		OG13											
Canada			26	54	30	42													
France			4	12	5	3													
Netherlands			4	12	5	13													
Australia			2	0	2	6													
United States			0	0	0	0													

Germany						5													
SPILLS	2012	2013	2014	2015	2016	2017													
Total number of all spills	78	137	119	188	145	170	No significant spills requiring reporting in financial statements 2012-2017	306-3											
Canada				99	81	88													
France				56	39	47													
Netherlands				24	15	18													
Australia				6	7	9													
United States				3	3	3													
Germany						5													
Volume of all spills: m3				181.9	179.5	31.5	2017: lowest spill volume since we began recording in 2004 (when Vermilion was less than one-third its current size)	306-3											
Canada				130.2	163.5	14.4													
France				23.0	7.6	11.4													
Netherlands				26.1	5.8	2.4													
Australia				2.4	0.1	2.3													
United States				0.2	2.4	1.0													
Germany						0.0													
WASTE	2012	2013	2014	2015	2016	2017	GRI												
Waste by type and disposal method: metric tonne	87,189	114,227	113,881	82,143	58,726	154,845	Waste metrics separated into hazardous & non-hazardous: data is in development	306-2											
Canada			112,658	50,170	21,624	52,056	Increase in development activity												
France			162	8,420	2,644	2,674													
Netherlands			114	4,501	18,909	51,386	Increase in recycling												
Australia			0	450	1,700	475													
United States			948	18,602	13,850	17,568													
Germany						30,685													
Reuse: metric tonne	0	7,400	21,935	78	114	1,999		306-2											
Canada			21,934	0	0	1,891	Reuse of invert muds												
France			0	0	0	0													
Netherlands			0	24	24	0													
Australia			1	54	90	108													
United States			0	0	0	0													
Germany						0													
Recycling: metric tonne	35.96977501	13.48	107	2,855	16,247	51,402		306-2											
Canada			25	43	13	218	Recycling from corporate headquarters												
France			29	2,091	170	189													
Netherlands			12	664	16,016	50,923													
Australia			42	58	49	72													
United States			0	0	0	0													
Germany						0													
Recovery, including energy recovery: metric tonne	1,551	0	0	0	0	88		306-2											
Canada			0	0	0	12	Oilfield Waste Processing (water and solids processing at landfill)												
France			0	0	0	0													
Netherlands			0	0	0	0													
Australia			0	0	0	0													
United States			0	0	0	0													
Germany						76													
Incineration: metric tonne	Not tracked	Not tracked	6,276	3,396	6,662	970		306-2											
Canada			0	0	3,771	0													
France			3,000	1,303	139	507													
Netherlands			3,276	2,094	1,580	463													
Australia			0	0	1,172	0													
United States			0	0	0	0													
Germany						0													
Deep well injection: metric tonne	46,026	3,649	74,323	49,506	21,329	59,376		306-2											
Canada			74,323	31,223	7,479	11,136	Increase in development activity												
France			0	0	0	0													
Netherlands			0	0	0	0													
Australia			0	0	0	0													
United States			0	18,284	13,850	17,554													
Germany						30,685													
Landfill: metric tonne	27,721	33,015	34,908	20,137	10,284	25,291		306-2											
Canada			34,860	13,511	6,457	23,242	Increase in development activity												
France			0	4,573	2,179	1,741													
Netherlands			0	1,715	1,259	0													
Australia			48	338	389	295													
United States			0	0	0	14													
Germany						0													
On-site storage: metric tonne	0	0	0	90	0	0		306-2											
Canada			0	90	0	0													
France			0	0	0	0													
Netherlands			0	0	0	0													
Australia			0	0	0	0													

United States			0	0	0	0												
Germany						0												
Other – Oilfield Waste Processing: metric tonne	11,855	70,150	4,679	6,081	4,091	15,807		306-2										
Canada			3,451	5,304	3,905	15,569	Increase in development activity											
France			280	454	156	238												
Netherlands			0	5	30	0												
Australia			0	0	0	0												
United States			948	318	0	0												
Germany						0												
Percentage of hazardous waste shipped internationally	0	0	0	0	0	69	Hazardous waste transported within and between operations: data is in development	306-4										
Canada	0	0	0	0	0	0												
France	0	0	0	0	0	0												
Netherlands	0	0	0	0	0	69												
Australia	0	0	0	0	0	0												
United States			0	0	0	0												
Germany						0												
DRILL MUD AND CUTTINGS	2012	2013	2014	2015	2016	2017												
Drill mud & cuttings produced using non-aqueous drilling fluid, onshore disposal to controlled sites: tonne	Limited data	18,844	23,823	9,358	4,950	7,906												
Canada				8,351	3,746	6,800	Increase in development activity											
France				0	778	238	Shift to aqueous drilling fluids											
Netherlands				689	426	868												
Australia				0	0	0												
United States				318	0	0												
Germany						0												
Non-Aqueous drilling fluid re-used at another location (i.e. recovered and transported invert): m3	New in 2015	New in 2015	New in 2015	2,192	824	736												
Canada				2,192	611	0												
France				0	0	0												
Netherlands				0	213	736												
Australia				0	0	0												
United States				0	0	0												
Germany						0												
Drill mud & cuttings produced using aqueous drilling fluid, onshore disposal to controlled sites: tonne	Limited data	Limited data	7,563	4,337	6,182	9,164												
Canada				2,562	2,509	3,302												
France				0	2,200	1,741												
Netherlands				1,775	875	1,787												
Australia				0	0	0												
United States				0	598	2,334												
Germany						0.0												
Drill mud & cuttings produced using aqueous drilling fluid, disposal at Vermilion controlled location: tonne	New in 2015	New in 2015	New in 2015	444	1,760	0	Disposal method: onsite/remote pump											
Canada				444	1,760	0												
France				0	0	0												
Netherlands				0	0	0												
Australia				0	0	0												
United States				0	0	0												
Germany						0												
INVESTMENT IN ENVIRONMENTAL PROTECTION	2012	2013	2014	2015	2016	2017												
Total environmental protection investment: \$CDN	\$39,954,133	\$37,441,842	\$36,956,969	\$25,714,010	\$25,949,339	\$26,884,165												
Canada	\$6,528,629	\$6,377,661	\$6,099,464	\$6,008,486	\$8,451,587	\$8,772,085												
France	\$10,786,743	\$13,385,250	\$10,907,708	\$4,555,225	\$4,513,376	\$9,152,582												
Netherlands	\$8,126,837	\$4,997,494	\$2,815,841	\$3,914,342	\$10,470,866	\$5,190,457	Recalculation of NL investment for 2016 to ensure consistency											
Australia	\$811,924	\$981,437	\$1,177,894	\$614,884	\$1,026,713	\$798,640												
United States			\$0	\$516,060	\$1,486,796	\$2,134,901												
Germany						\$835,500												
Waste disposal, emissions treatment, remediation	\$3,438,407	\$6,069,660	\$15,805,157	\$10,043,909	\$11,093,488	\$7,141,269												
Canada	\$899,825	\$1,817,792	\$3,456,493	\$2,467,810	\$1,076,807	\$1,251,000												
France	\$1,568,838	\$3,575,837	\$10,258,340	\$3,625,814	\$2,140,827	\$2,882,023												
Netherlands	\$879,998	\$577,981	\$1,510,210	\$3,772,342	\$6,680,206	\$1,085,892												
Australia	\$89,746	\$98,050	\$580,114	\$177,942	\$186,311	\$317,802												
United States			\$0	\$0	\$1,009,337	\$1,593,295												
Germany						\$11,257												
Prevention and environmental management costs	\$36,515,726	\$31,372,182	\$21,151,812	\$5,565,089	\$8,565,239	\$9,716,048												
Canada	\$5,628,804	\$4,559,869	\$2,642,971	\$3,540,676	\$5,141,019	\$4,152,344												
France	\$9,217,906	\$9,809,414	\$649,368	\$929,411	\$352,033	\$561,958												
Netherlands	\$7,246,839	\$4,419,513	\$1,305,630	\$142,000	\$1,861,129	\$3,768,126												

Australia	\$722,178	\$883,387	\$597,780	\$436,942	\$840,402	\$480,838										
United States			\$0	\$516,060	\$370,656	\$448,299										
Germany						\$304,483										
Discharge of Abandonment	\$13,700,000	\$11,700,000	\$15,956,061	\$10,105,012	\$6,290,612	\$10,026,848										
Canada					\$2,233,761	\$3,368,741										
France					\$2,020,516	\$5,708,600										
Netherlands					\$1,929,531	\$336,439										
Australia					\$0	\$0										
United States					\$106,803	\$93,308										
Germany						\$519,760										
Fines for environmental non-compliance	\$0	\$0	\$0	\$0	\$0	\$0		307-1								

[illegible]

## GRI MATERIALITY ANALYSIS – SUSTAINABILITY REPORT APPENDIX

Aspect	Boundary Assessment		Impact on Vermilion	Impact or Concern for Key Stakeholders						
BU=business unit	Relevance or impact inside Vermilion	Primary impact or relevance outside Vermilion, through our value chain		Shareholders & potential investors, including rating agencies	Staff	Partners & Suppliers	Communities	Government and Regulators	Other (Media, Industry associations, NGOs)	Average of Stakeholder Impact or Concern
Employment	All BUs	Exploration Production	High	Medium	High	High	High	High	High	High
Labor/Mgmt Relations	All BUs	Exploration Production	Medium	Low	High	Low	Low	Medium	High	Medium
Occupational Health and Safety	All BUs	All stages	High	High	High	High	High	High	High	High
Training and Education	All BUs	All stages	High	Medium	High	Medium	Low	Medium	High	High
Diversity and Equal Opportunity	All BUs	Exploration Production	Medium (increasing)	Medium	High	Medium	Medium	High	High	Medium
Equal Remuneration for Women and Men	All BUs	Exploration Production	Medium	Medium	High	Medium	Medium	High	High	Medium
Supplier Assessment for Labour Practices	All BUs	Supply	High	Medium	Medium	High	High	High	High	High
Grievances	All BUs	All stages	High	Medium	High	High	High	High	High	High
<b>HUMAN RIGHTS</b>										
Investment	All BUs	Exploration	Medium	Low	Low	Medium	Medium	High	High	Medium
Non-discrimination	All BUs	All stages	High	Medium	High	High	High	High	High	High
Freedom of Association and Collective Bargaining	All BUs	All stages	Low	Low	High	High	Low	High	Medium	Medium
Child Labour	All BUs	Exploration	Low	High	Low	High	Low	High	High	Medium
Forced or Compulsory Labour	All BUs	Exploration	Low	High	Low	Medium	Low	High	High	Medium

Aspect	Boundary Assessment		Impact on Vermilion	Impact or Concern for Key Stakeholders						
BU=business unit	Relevance or impact inside Vermilion	Primary impact or relevance outside Vermilion, through our value chain		Shareholders & potential investors, including rating agencies	Staff	Partners & Suppliers	Communities	Government and Regulators	Other (Media, Industry associations, NGOs)	Average of Stakeholder Impact or Concern
Security Practices	All BUs	Exploration	Low	Low	Low	High	High	High	High	Medium
Indigenous Rights	CBU, USBU	All stages	Medium (increasing)	Medium	Medium	Medium	Medium	High	High	Medium
Operations HR Assessments	All BUs	Exploration	Medium (increasing)	Medium	Medium	Medium	Medium	High	High	High
Supplier HR Assessments	All BUs	Supply	Medium (increasing)	Medium	Low	Medium	Medium	High	High	Medium
Human Rights Grievance Mechanisms	All BUs	All stages	Medium	Medium	Medium	Medium	Medium	High	High	Medium
SOCIETY										
Local communities	All BUs	All stages	High	Medium	High	Medium	High	High	High	High
Anti-corruption	All BUs	All stages	High	High	High	High	High	High	High	High
Public Policy	All BUs	All stages	High	Medium	Low	Low	Medium	High	High	Medium
Anti-competitive behaviour	All BUs	All stages	High	Medium	Medium	High	Medium	High	Medium	Medium
Compliance	All BUs	All stages	High	High	Medium	High	High	High	High	High
Supplier Assessment for Impacts on Society	All BUs	Supply	Medium	Medium	Low	Medium	High	Medium	High	Medium
Grievance Mechanisms for Impacts on Society	All BUs	All stages	High	Medium	Low	Low	High	High	High	Medium
Emergency Preparedness	All BUs	All stages	High	High	High	High	High	High	High	High
Involuntary Resettlement	n/a	n/a	Low	Low	Low	Low	Low	Low	Low	Low



## GRI MATERIALITY ANALYSIS – SUSTAINABILITY REPORT APPENDIX

Aspect	Boundary Assessment		Impact on Vermilion	Impact or Concern for Key Stakeholders						
	Relevance or impact inside Vermilion	Primary impact or relevance outside Vermilion, through our value chain		Shareholders & potential investors, including rating agencies	Staff	Partners & Suppliers	Communities	Government and Regulators	Other (Media, Industry associations, NGOs)	Average of Stakeholder Impact or Concern
Asset Integrity & Process Safety	All BUs	All stages	High	High	High	High	High	High	High	High
Governance	All BUs	All stages	High	High	High	High	High	High	High	High
Ethics	All BUs	All stages	High	High	High	High	High	High	High	High
<b>PRODUCT RESPONSIBILITY</b>										
Customer Health & Safety	Corporate	Product Use	Medium	Medium	Medium	Medium	High	High	High	High
Product & Service Labelling	Corporate	Product Use	Medium	Medium	High	High	High	High	High	High
Marketing Communications	Corporate	Distribution	Low	Low	Low	Low	Medium	Low	Medium	Low
Customer Privacy	Corporate	Distribution	Medium	Medium	Low	Medium	Low	Medium	Medium	Medium
Compliance	Corporate	All stages	High	Medium	Medium	Medium	High	High	High	Medium
Fossil Fuel Substitutes	Corporate	All stages	Medium	Medium	Medium	Medium	Medium	High	High	Medium

VERMILION  
ENERGY



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Vermilion's 2018 Corporate Day of Caring took place at Wood's Homes new Inglewood Campus, a hub with services geared towards vulnerable youth.

