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# **OUR APPROACH**

As a North American resource company, we strive to be among the most efficient producers of oil and natural gas. We believe our multi-basin, liquids-focused portfolio, coupled with our strategy, make our business both resilient and sustainable. Driving our environmental, social and governance (ESG) performance is our culture of innovation and efficiencies designed to yield enhanced ESG performance and shareholder value. Encana contributes to the strength and sustainability of the communities where we operate by partnering with employees, key stakeholders and community organizations and endeavors.



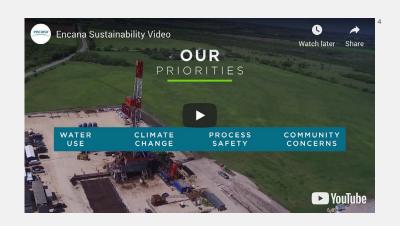
WHERE WE OPERATE

**ENCANA'S VALUES**<sup>2</sup>

### SUSTAINABILITY SUMMARY

Sustainability reporting at Encana addresses a variety of ESG areas material to our business strategy. We track and report our ESG performance with guidance from, and by applying the standards of, several leading ESG and shareholder proxy advisory firms.

Our sustainability report summarizes key aspects and performance from full year 2018 and beyond and is focused on our direct operations as outlined in the 2018 Annual Report.3 Our rigorous internal annual review process by subject matter experts, leadership and Encana's Board of Directors ensures what we report is accurate and relevant.



### **ENCANA AT A GLANCE**



<sup>(1)</sup> www.encana.com/assets/ (2) www.encana.com/strategy/



### **SUSTAINABLE DEVELOPMENT GOALS**

We believe the United Nations Sustainable Development Goals (SDGs) provide useful guidance to help direct our sustainability approach. Encana is a member of IPIECA,<sup>5</sup> an organization focused on international environmental and social issues impacting the oil and natural gas industry. IPIECA has partnered with the United Nations Development Programme and International Finance Corporation to develop a shared understanding of the implications of the SDGs for the oil and gas industry and how the industry can most effectively contribute.



At Encana, the following SDGs are particularly relevant to our business and are areas we believe will have a significant positive impact on our industry and Encana operations.

### AFFORDABLE AND **CLEAN ENERGY**

Access to affordable, reliable energy is essential for the growth of strong economies, sustained improvements to quality of life and eradication of poverty. The oil and gas industry and Encana are committed to helping address the critical issue of sustainable, modern energy access.

#### LIFE ON LAND

The industry is committed to responsibly integrating the management of biodiversity and ecosystem services across the life cycle of oil and gas operations. At Encana, our projects and facilities are designed to mitigate potential impacts in the areas where we operate.

### **RESPONSIBLE CONSUMPTION AND PRODUCTION**

Oil and gas companies are doing their part to meet responsible consumption challenges by mitigating impacts and improving development. Climate action the efficiency of their operations. At Encana, we support energy efficiency through the implementation of product stewardship principles, ensuring effective management of chemicals and waste, directional drilling when necessary and feasible and by sharing energy efficiency knowledge and increasing energy literacy among consumers.

#### **CLIMATE ACTION**

We believe that it is possible to address climate change risks while also meeting global energy demand and supporting economic by government, business and civil society should not sacrifice economic development, employment or social objectives. The oil and natural gas industry has a unique role to play in engaging on climate policy as we continue to supply the world's energy into the future.

### **DECENT WORK AND ECONOMIC GROWTH**

Sustainable development requires job creation and inclusive economic growth. Our industry continues to make significant contributions to local economies. Employment is a crucial path out of poverty towards shared prosperity. We contribute to local communities, investing in opportunities for job creation and local business development.



# ENVIRONMENTAL, SOCIAL AND GOVERNANCE **MATERIALITY AND TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES**

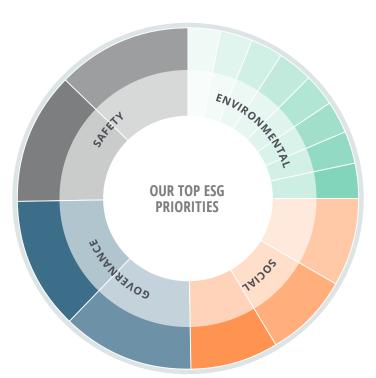


### **ESG MATERIALITY**

Our annual materiality assessment allows us to work with our key stakeholders in determining the material ESG factors that have the potential to impact our strategy and ability to deliver shareholder value.

Dave Lye, Vice President, Sustainability and Canadian Government Affairs

In 2018, we identified the following ESG issues as being most impactful to our business strategy and operations. Encana engages with key internal and external stakeholders each year to complete a materiality assessment identifying ESG issues that may affect our corporate strategy. Through this assessment, we evaluate ESG issues against two criteria: impact to our business and importance to stakeholders.



### **ENVIRONMENTAL**

- Climate change
- Water
- Seismic activity
- Spills
- Air emissions
- Biodiversity
- Chemical use
- Waste management

#### SOCIAL

- Community concerns
- Indigenous concerns
- Development restrictions

### **GOVERNANCE**

- Stakeholder activism
- Legacy assets

#### **SAFETY**

- Process safety
- Occupational health and safety



### **TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES:**

The Financial Stability Board established an industry-led task force: the Task Force on Climate-related Financial Disclosures (TCFD),6 to help identify the climate-related financial disclosures that would be useful to investors, lenders and insurance underwriters in understanding material risks. The Task Force developed four widely adoptable recommendations on climate-related financial disclosures: governance, strategy, risk management and metrics and targets. Encana is incrementally adopting the TCFD recommendations while continuing our ongoing efforts to identify and manage potential climate risks.



### **GOVERNANCE**

Our existing governance framework allows us to effectively manage climate-related risks throughout our company. Sustainability and ESG-related issues and risks are evaluated by the Board on a quarterly basis. As part of Encana's Board of Director's Mandate, the Board is required to annually review and adopt a strategic planning approach and approve the corporate strategic plan, which considers opportunities and risks to the business. The Corporate Responsibility, Environment, Health and Safety Committee (CREHS)7, a committee of the Board, is responsible for oversight of sustainability, ESG-related issues and ensuring overall corporate responsibility. CREHS also reviews and makes recommendations on Encana policies, standards and practices regarding sustainability and climate change.

### RISK MANAGEMENT

Climate-related considerations are integrated into key business planning and risk management processes throughout the company. As outlined in our Corporate Risk Management Policy, the Board is required to review quarterly risk reports that identify the significant risks to Encana and the mitigation strategies in place. Encana also engages with key internal and external stakeholders each year to complete an ESG materiality assessment that identifies issues that may affect our corporate strategy. Through this assessment, we evaluate ESG issues against two criteria: impact to our business and importance to stakeholders. The results of this assessment are communicated to the Executive Leadership Team and the CREHS Committee of the Board.

### **METRICS AND TARGETS**

Encana has an established history of annually measuring, managing and reporting our performance on climate-related issues and then benchmarking our performance against our peers. In Canada, the oil and natural gas sector will be subject to new regulations, effective January 1, 2020, designed to ensure the sector's methane emissions are reduced by 40 – 45% by 2025, relative to 2012 emissions. We have pledged to implement actions which will ensure compliance with the new regulations when they become effective. From 2016 - 2018, our methane intensity decreased from .43 tCH<sub>4</sub>/MBOE in 2016 to .22 tCH<sub>4</sub>/MBOE in 2018. Over that same three-year period, we also decreased our greenhouse gas intensity from 27.12 CO<sub>2</sub>e/BOE in 2016 to 17.33 CO<sub>2</sub>e/BOE in 2018. Our performance highlights our objective to utilize technology and innovation in our operations to manage climate-related risks.

All sustainability performance data and metrics can be found here.8



### **STRATEGY**

Encana's business strategy is risk-based and incorporates a focus on identifying the key ESG issues that have the potential to impact our strategy. Our approach to strategic planning and scenario analysis is conducted on a year-round basis and considers the impacts of commodities pricing, carbon pricing, regulations and the long-term financial impacts associated with climate change. This process incorporates insights from various contributors within the company as well as external advisors and private commodity market analysis firms, and consists of four interconnected and iterative workflows:

#### **MACRO ASSESSMENT**

We conduct a macro assessment of the business and industry environment that focuses on key trends, risks and opportunities with the potential to impact our corporate strategy.

#### **DEVELOP STRATEGIC ASSESSMENT**

We incorporate the above findings in developing a strategic assessment and analysis to test the fitness of the current strategy and discuss potential pathways to deliver value to shareholders over the short and long-term. This assessment is presented to and discussed with the Board of Directors on at least an annual hasis.

#### **BENCHMARK ASSESSMENT**

We benchmark our strategic and competitive positioning versus companies both inside and outside the exploration and production industry. This provides real-time business intelligence and enhances our understanding of peer strategies and industry trends.

#### PORTFOLIO ASSESSMENT

We conduct an internal assessment to evaluate the current state of the portfolio while considering potential opportunities to advance or enhance value through technological innovation and efficiencies, reduction of uncertainty and optimizing allocation of our resources. During this phase, a suite of individual asset development profiles are constructed or revised to test various scenarios and approaches to optimize long-term value creation.

Climate-related risks are considered throughout our corporate strategic planning and scenario analysis process. In conducting our scenario analysis we relied on internal modeling, supported in part with the International Energy Agency's (IEA) World Energy Outlook 2018 9 to better understand the future patterns of a changing global energy system. In the 2018 Outlook, the IEA includes three scenarios: (1) the "Current Policies Scenario" that assumes no changes to policies in place, (2) the "New Policies Scenario," reflecting the effects of announced policies, and (3) the "Sustainable Development Scenario" that represents an integrated approach to avoid an increase in global temperature beyond 2 degrees Celsius above pre-industrial levels. By using scenarios, we can consider a range of potential risks around commodity prices, and the potential risk associated with emissions reduction scenarios. Through our internal scenario process, we test our current portfolio of assets against potential future outcomes to determine where challenges and opportunities exist.



### **STRATEGY** (Continued)

We recognize that climate-related risks have the potential to impact our business in several areas.

### **CARBON TAX**

We incorporate the above findings in developing a strategic assessment and analysis to test the fitness of the current strategy and discuss potential pathways to deliver value to shareholders over the short and long-term. This assessment is presented to and discussed with the Board of Directors on at least an annual basis.

#### **COMMODITY PRICES**

To better understand the range of risks associated with future commodity prices and the potential price risk associated with GHG reduction scenarios, we utilize a range of commodity prices in our scenario work that helps to provide insight into the potential supply and demand of our products.

#### **OPERATIONS**

Severe weather events including hurricanes, fires and floods can impact our operations. We continue to explore engineering and processes resiliency planning to help mitigate the physical risks of a changing climate.

We believe our corporate strategy and multi-basin approach enables us to meet the challenges posed by current and future climate-related risks. Our development portfolio is highly focused on short cycle time opportunities which allows to maintain operational flexibility at both the asset and portfolio level. This provides for fast conversion of capital into cash flow, and a high degree of agility in managing risk and responding to opportunities. In a challenging market, we have continued to demonstrate capital discipline while also lowering overhead and general operating costs. We expect to remain a leading North American low-cost operator by strategically managing our supply chain and utilizing technology and innovation to responsibly develop our assets.



# SUSTAINABILITY GOVERNANCE

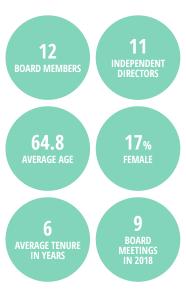
Corporate governance is critical to Encana's business strategy and corporate culture.

We aim to conduct our business with the highest ethical standards. We prioritize stakeholder interest and take accountability in maintaining transparency, integrity and compliance in every aspect of our operations.



# BOARD AND OVERSIGHT





Encana's Board of Directors (Board)\_10 plays a fundamental role in the leadership of our company's strategy and ensures that principled and ethical corporate conduct is observed through the implementation of appropriate governance and internal controls. Encana's board committees\_11 play a key role in risk oversight and are responsible for ensuring proper management of environment, health and safety (ESG), human resources, reserves, accounting and corporate responsibility matters. The Corporate Responsibility, Environment, Health and Safety Committee (CREHS)<sup>12</sup> is a committee of the Board that is responsible for oversight of sustainability and ESG-related issues and ensuring an overall corporate responsibility program is in place and applied. The CREHS Committee also reviews and makes recommendations on Encana policies, standards and practices regarding sustainability. Sustainability and ESG-related issues and risks are evaluated by the Board, including those relative to our internal corporate risk report. The Board also engages directly with external stakeholders on topics relevant to ESG-related issues, including those relative to company strategy.

The effectiveness of Encana's management is enhanced by the diverse perspectives, skills and experience of our Board members. Encana considers diversity of skills and expertise when identifying qualified candidates for board positions and leadership opportunities. This is reflected in our long history with a diverse board membership and executive leadership team, as well as our succession and leadership development process. Board member skills and expertise are highlighted below.

<sup>(10)</sup> www.encana.com/governance/

<sup>(11)</sup> www.encana.com/board-composition-and-committees/



### **BOARD AND OVERSIGHT**

(Continued)

SKILLS & EXPERTISE	BOARD MEMBERS											
	Dea	Fowler	Mayson	McIntire	McKenzie	Nance	Nimocks	Ricks	Shaw	Suttles	Waterman	Woitas
Accounting, Finance and/or Audit				•	•		•	•	•		•	
Environment, Health and Safety	•	•	•	•		•				•		•
Financial Expert					•			•			•	
Governance		•		•	•	•	•	•	•			•
Human Resources/ Compensation		•		•	•	•	•	•	•		•	
Mergers/ Acquisitions and Divestitures	•	•	•			•	•		•	•	•	•
Natural Gas, Oil and Natural Gas Liquids Development/ Operations	•	•	•		•	•	•			•		•
Public Policy/ Government Relations	•		•	•						•	•	•
Reserves	•		•			•		•		•		•
Risk Management	•	•		•			•	•	•	•	•	

For more information on our Board, visit our corporate governance page.<sup>13</sup> For more information on our governance practices, see our latest proxy statement.14

### ETHICS, INTEGRITY AND COMPLIANCE

Encana conducts business with integrity and in compliance with local laws and regulations where we operate. Encana's Business Code of Conduct 15 and Corporate Responsibility Policy 16 demonstrate our ongoing commitment to conducting our business ethically. All employees are required to commit to the Code of Conduct on an annual basis, acknowledging their understanding of and compliance with its key policies. Such measures are designed to ensure our workforce is always working in compliance with all Encana policies and practices.<sup>17</sup> Employees are encouraged to report any suspected illegal or unethical behavior through Encana's Integrity Hotline, 18 which directs reports of improper conduct for investigation and appropriate resolution.

# **SUSTAINABILITY PERFORMANCE** COMPENSATION

To align the company with its overall yearly targets and metrics, Encana offers all employees the opportunity to participate in our annual bonus program and earn a cash award. Eligibility is based on a combination of financial and operational performance results measured against company metrics, as well as employee performance measured against individual objectives for the year. To communicate overall company key metrics and targets, we create a company scorecard to reflect the company-wide goals for the year and how they will be measured. Throughout the year, we track our progress and provide a total performance company score for year-end. Encana's company scorecard includes a safety modifier that reinforces our commitment to achieving our company metrics safely. Our company scorecard's safety modifier enables the Board to adjust our overall score to reflect the strength or weakness of our safety performance. In 2018, a safety modifier of 20% was applied after the Board determined that achieving the "safest year ever" for the fifth consecutive year justified an increase to our company score.

(16) www.encana.com/wp-content/uploads/2019/10/corporate-responsibility-policy.pdf

<sup>(15)</sup> www.encana.com/wp-content/uploads/2019/10/business-code-of-conduct.pdf

<sup>(17)</sup> www.encana.com/about/board-governance/policies/



# **ENVIRONMENT**

We are committed to achieving environmentallyconscious performance throughout the entire lifecycle of our operations. Our approach to resource development continually focuses on efforts to minimize the impact on air, water and land.



### **CLIMATE CHANGE AND AIR QUALITY**

Encana understands the need to balance climate change impacts with the basic requirements by society for affordable and reliable energy. We work closely with our key stakeholders to address concerns related to climate change. This includes collaborating with industry to inform regulatory development and participating in voluntary programs like The Environmental Partnership.

"At Encana, sustainability is exemplified in our efforts towards innovative and efficient business practices. The Environmental Partnership provides a forum for collaborating with industry partners on the use of technologies and best management practices to reduce emissions without dictating solutions. Encana's participation in The Environmental Partnership demonstrates our commitment to reducing VOC emissions through innovation and deployment of efficient, sustainable business practices."

- Mike McAllister, President

#### **EFFICIENCY**

Policy should define success through emission reduction objectives while allowing the emitters' the maximum technical and economic flexibility to achieve those goals.

### **BALANCE**

Policy should deliver economic growth, environmental protection, a secure and reliable energy supply and should be harmonized across jurisdictions, to the extent practical.

#### COMPETITIVENESS

Policy should maintain competitiveness among the energy-intensive trade-exposed industries, ensure compatibility with major trading and economic partners and support long-term capital investments in the upstream oil and natural gas sector.

#### **TECHNOLOGY**

Policy should encourage technologies to reduce emissions without mandating solutions.



### **GREENHOUSE GAS REGULATIONS**

Encana meets the Environmental Protection Agency's greenhouse gas (GHG) regulatory requirements. In the United States, Encana complies with New Source Performance Standards (NSPS OOOO and OOOOa) which apply to oil and gas production sources of methane emissions. In Canada, Encana meets the Environment and Climate Change Canada GHG regulatory requirements at the Federal level and has met BC and AB GHG regulatory requirements at the Provincial level for more than a decade. In addition, the oil and gas sector will be subject to new Federal and Provincial methane regulations, effective January 1, 2020, designed to ensure the sector's methane emissions are reduced by 40 to 45 percent by 2025, relative to 2012 emissions. We have pledged to implement actions which will ensure compliance with the new regulations when they become effective. Encana actively participates with trade organizations to provide input to regulatory agencies on the development and implementation of GHG regulations. We also work with industry partners and government agencies to align best practices for emission reduction strategies and coordinated regulatory responses.

### **EMISSIONS MANAGEMENT**

As oil and natural gas production continues to increase, companies are focused on limiting emissions and improving production efficiencies with innovative solutions. As we look to the future, new and improved technology will continue to evolve and be developed—enabling the production of oil and natural gas in lower-emitting ways.

Encana is committed to reducing GHG emissions and methane intensities through operational efficiencies and innovation. We report gross emissions metrics with data from combustion, flaring, venting and fugitive sources and use intensity metrics to provide a more contextual measure of our impact and normalize the data.



Encana closely follows technology advancements and deploys efficient and cost-effective technologies consistent with regulatory requirements and best management practices.

In some of our production operations, we have replaced equipment that historically utilized fuel—either as motive driver such as pneumatic controllers or combustion such as pump jack engines—with electric-driven equipment. The electric power is either supplied from the grid or on-site electric generators (gas fired engines). Examples of electric-driven equipment includes:

- · Pump jacks and jet pumps for liquids lifting.
- · Process controllers (e.g. liquid level controllers).
- Chemical and fluid transfer pumps.
- Lease automatic custody transfer units.
- · Vapor recovery units.

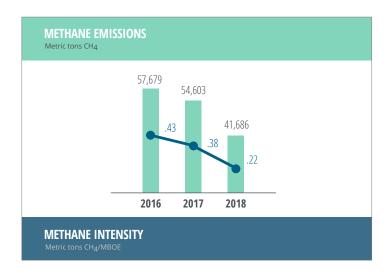
Encana is continuing efforts to equip facilities, well sites and pipelines with GHG emissions reduction technologies, including:

- Conducting inline testing, where practical, to reduce flaring during completions.
- Installing vapor recovery units and electric-drive overhead compressors, pumpjack and jet pumps, process controllers, chemical and fluid transfer pumps and LACT units.
- Replacing high-bleed pneumatic devices with low-bleed. Encana has replaced more than 450 high emitting pneumatic devices, resulting in significant CO<sub>2</sub>e reductions.
- Installing instrument air-driven pneumatic devices to eliminate vented methane emissions.
- Eliminating emission emitting equipment such as line heaters.
- Reducing the number of pneumatic chemical injection pumps required to service multi-well pads by 75%.
- Electrifying natural gas processing facilities. Encana has electrified its three largest gas processing facilities in British Columbia using hydro-generated power. When running at full capacity, this shift avoids CO<sub>2</sub> emissions by approximately 860,000 tons per year.
- Supporting the development of leak detection and repair technologies.



### METHANE **AND FUGITIVE EMISSIONS**

Tracking and reporting methane metrics and intensity allows us to consistently benchmark our methane reduction efforts through the full scope of our operations. Most of our methane emission volumes are based on regulatory approved emission factors, operating activity, hydrocarbon composition and gas analysis.



### **LEAK DETECTION** AND REPAIR

In the U.S., Encana has been completing Leak Detection and Repair (LDAR) surveys, employing the use of Optical Gas Imaging (OGI) cameras for nearly 10 years. Our Canadian program is under development and we plan to begin implementing in 2020. Today, many of our facilities are subject to federal and/or state regulatory LDAR requirements. In 2017, Encana was a founding member of The Environmental Partnership and committed to the LDAR program. As part of The Environmental Partnership program, we have implemented a voluntary LDAR program to complete surveys at some of our non-regulated facilities. Our LDAR program comprises the following core elements:

### **SURVEY TECHNOLOGY**

We use OGI cameras to detect hydrocarbon leaks not visible to the naked eye. The OGI camera allows for quick and safe monitoring of equipment and helps identify which components may need repair. We also have employed the use of an unmanned aerial vehicle or drone equipped with an OGI camera to conduct aerial surveys of facilities and pipelines. We supplement OGI surveys with Audible, Visual, Olfactory (AVO) surveys.

### LEAK IDENTIFICATION AND REPAIR

We have protocols for the identification and repair of observed leaks and inspection of the repaired components/ equipment. Since our LDAR program is "internally implemented," we are able to repair the significant majority of leaks as soon as they are observed.

### **SURVEY COMPONENTS** AND EQUIPMENT

We survey equipment (e.g. wellhead, separators, heaters, tanks, flow lines) for leaks from malfunctioning components (e.g. valves, connectors/ flanges, pressure relief devices, open ended lines) and malfunctioning equipment (e.g. tank thief hatches, sight glasses, regulators, gauges, controllers).

### **SURVEY FREQUENCY**

We conduct an initial LDAR OGI survey of new wells and tank batteries within 60 days of commencing production. We conduct LDAR OGI surveys in accordance with regulatory requirements at regulated facilities. Our voluntary LDAR OGI surveys are conducted in accordance with The **Environmental Partnership** guidelines. We also visit facilities as needed based on field observations.

### **SURVEY DOCUMENTATION**

We utilize tablet-based technology to log LDAR survey observations (both OGI and AVO surveys). Using this digital logging system allows data to be automatically sent to our compliance tracking system. We can track the date(s) of inspection, the type of component/equipment leaking and the date of leak repair and confirmation (re-survey).

### DIRECTED INSPECTION AND MAINTENANCE

We review the LDAR survey data to look for trends and strategically identify specific facilities or components/ equipment with greater potential to be leaking. For these sources, we can implement directed inspection and maintenance activities to mitigate and minimize the potential for leaks.



### WATER

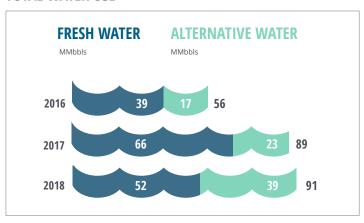
Water is a critical resource and Encana takes responsibility for the water we use extremely seriously. All forms of energy require water somewhere along the development cycle. Although access to water and water scarcity are global issues, our water management approach is specifically tailored to address local or regional water concerns. Encana's

water management program carefully considers location, resources, regulations, cost, operational need and innovation. Each of our operating areas has a locally focused water management plan that works in compliance with local regulatory requirements and encourages responsible use. This means no single water management

approach works in all of Encana's operating areas and the water sources we use vary from region to region.

In 2018, 53% of water used in our Permian operations was recycled, resulting in a total cost savings of \$47 million.

#### **TOTAL WATER USE**



### WATER AND **HYDRAULIC** FRACTURING

Much of Encana's water use occurs during hydraulic fracturing operations. The goal of hydraulic fracturing is to enhance hydrocarbon recovery by creating pathways for the natural gas and oil trapped in the rock to flow through the wellbore to production equipment at the surface. This controlled operation pumps a mixture of fluids (primarily water) and sand through the wellbore to the targeted formation at a high pressure in multiple intervals or stages. In all Encana operations, rigorous water management and protection are vital parts of this process. Proper wellbore design and a steel casing system prevent fluids migrating from the wellbore and protect local groundwater. Our wells are designed with advanced planning and engineering. Constructed with multiple layers of high-strength and impermeable steel casing and cement to protect groundwater and freshwater zones, our wells are built to last until the production phase has concluded.

Encana uses multiple techniques to monitor each hydraulic fracture treatment it conducts. Encana ensures the integrity of the casing and cement system through field inspection and wellbore logging. Before we begin completion operations, we

pressure-test to ensure integrity. We then continually monitor pressures during each fracturing operation. Any flow of fluids into non-targeted areas would immediately be detected by a sudden loss in pressure and operations would be halted. Hydraulic fracturing processes are strictly regulated by various state or provincial government agencies. We continue to build upon our detailed understanding of the chemicals used in the hydraulic fracturing process to ensure the company is using the most responsible hydraulic fracturing fluid formulations and fluid management practices available.



### **RESPONSIBLE PRODUCTS AND CHEMICAL DISCLOSURE**

Encana's Responsible Products Program <sup>19</sup> provides guidance on managing additive and chemical use in hydraulic fracturing in order to comply with regulation and mitigate potential environmental and health impacts. All hydraulic fracturing fluid products we use are assessed for potential impact to the environment and human health using generally accepted toxicological criteria. Encana prohibits the use of hydraulic fracturing fluid products containing diesel fuels and heavy metals such as arsenic, cadmium, chromium, lead, mercury, 2-Butoxyethanol (2-BE) or benzene. Through the Responsible Products Program, we encourage our suppliers to improve their public disclosure of fluid formulations and to continually advance the development of more responsible fluid additives and continually test new technologies that reduce environmental exposure and risk.

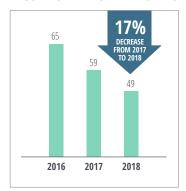
We are required by state, provincial and federal law to keep Safety Data Sheets (SDSs), which are prepared and provided by a third-party supplier. The SDSs detail the

ingredients used in hydraulic fracturing fluid at each well location. U.S. and Canadian regulatory bodies have established standards for the disclosure of this information, including the protection of trade secrets and confidential business information, and how this information is reported on the SDSs. Encana provides the information from the SDSs, which includes all the ingredients that we are legally permitted to share, to the FracFocus <sup>20</sup> chemical disclosure registry, along with 1,300 other reporting companies.

### SPILL PREVENTION, **AND FLUID MANAGEMENT**

Preventing spills is essential to minimizing environmental impact and ensuring a safe workplace. Effective spill management requires routine maintenance, situational preparedness, continuous improvement and adherence to regulatory reporting requirements. Our Spill Prevention Principles 21 focus on four areas: transferring fluid, following operational procedures, ensuring equipment integrity and considering spill prevention in our site design. We use these four focus areas to incorporate field-based practices into our operations and work sites to prevent spills from occurring and to manage and report them accurately if they do occur. In 2018, we saw a reduction in reportable spills of nearly 17% across all assets and many reportable spills remained on-site or within secondary containment and were immediately cleaned up.

#### **REGULATORY REPORTABLE SPILLS**



# LAND **MANAGEMENT** RECLAMATION

We strive to ensure land is restored and mitigated after we drill and complete a well. Our comprehensive land management approach allows us to do this responsibly through life-cycle analysis, planning and mitigation assessments from the initial site and risk analysis through the abandonment and reclamation stages. For many of our assets, detailed pre-planning sessions occur with a broad range of internal experts including biologists, hydrogeologists, hydrologists and development engineers to ensure any potential environmental risks to wildlife, water and land resources are effectively identified and managed.



<sup>(19)</sup> www.encana.com/wp-content/uploads/2019/10/responsible-products-program.pdf

<sup>(21)</sup> www.encana.com/wp-content/uploads/2019/10/spill-prevention-principles.pdf



### WILDLIFE AND HABITAT/ **BIODIVERSITY**

Biodiversity plays an important role in our environmental stewardship program. Our wildlife and habitat practice involves an effective process of continual identification, assessment and management. During planning and development, we identify sensitive areas, then work to conserve wildlife habitat and biodiversity. We also minimize or mitigate adverse impact and disturbance to wildlife and ecosystems through restricted activity periods, land use guidelines and setbacks. We engage with government agencies, local communities and landowners to understand and address specific wildlife and biodiversity issues in each of our operational areas.



### **MATERIALS AND WASTE**

Effective materials and waste management enables Encana to mitigate impacts to the environment. In accordance with regulatory requirements, we aim to reuse and recycle, properly handle, store, transport and dispose of materials and waste that cannot be reused or recycled. Through our materials and waste program, we designate responsibilities for data collection and reporting, and implement a process to ensure waste and materials are characterized, classified, tracked and appropriately handled, transported, stored

and recycled or disposed. We also look to promote material recycling, recovery, reduction and reuse in Encana operations, where applicable.

Drilling residuals are the mixture of fluids, mud and cuttings that come out of the well during the drilling and completion process. Drilling residuals are managed onsite and properly disposed in accordance with applicable regulations. While the disposal of drilling waste is regulated differently depending on regulatory jurisdiction, regulations are fairly uniform

and include requirements for classification as hazardous or non-hazardous, manifesting, transportation and disposal methods. We have implemented processes to assess transporters of waste and materials as well as treatment, disposal and recycling facilities used by Encana to ensure they comply with regulations and conform to the company's requirements. Service providers working on our behalf are expected to comply with applicable regulations and Encana guidelines.

### **NATURALLY OCCURRING** RADIOACTIVE MATERIALS (NORM)

NORM is a type of material that may be encountered at Encana locations. Encana has developed a program to protect the health and well-being of our employees and service providers by establishing roles, responsibilities, requirements and training related to potential exposure to NORM. NORM can be brought to the surface with produced water during oil and gas operations and may accumulate on equipment. In accordance with regulatory requirements and our own NORM management program, personnel who may come into contact with NORM are required to undergo awareness training. Personnel who survey equipment for NORM contamination are required to receive training in the use of survey instruments, equipment sampling strategies and the requirements contained in this practice.



### **SEISMICITY**

Some areas of North America are experiencing increasing localized frequency of induced seismic activity which has been associated with oil and gas operations. Although the occurrence and risk of seismicity in relation to oil and gas operations is generally very low, it has been linked to the storage of wastewater in deep saltwater disposal wells and has been correlated with hydraulic fracturing activities. Encana has operating procedures to help manage the occurrence and magnitude of induced seismicity to levels that minimize any associated or perceived risks.

Encana supports research efforts in conjunction with regulators that helps inform the understanding and management of induced seismicity events. We are proactively addressing seismic activity through partnerships with independent research institutions and regulatory agencies to track and identify potential causes of induced seismicity.

We have aligned ourselves with the Canadian Association of Petroleum Producers hydraulic fracturing operating practice,<sup>22</sup> as well as American Exploration & Production Council, the Oklahoma Corporation Commission and American Petroleum Institute efforts to reduce induced seismicity risks. Encana continues to work with regulatory agencies and monitor studies that address seismicity.

The United States Geological Survey 23 and Independent Petroleum Association of America 24 provide additional insight into current research and metrics regarding induced seismicity.

### **ENCANA SEISMICITY MITIGATION PLAN**

### PLANNING AND DESIGN

As an integral step to the process of planning and designing disposal or producing wells that require hydraulic fracturing, identify and consider all possible faults, geohazards and basement intervals that could increase the risk of seismicity.

### REGULATORY COMPLIANCE

Operate water disposal wells in compliance with all rules regulating injection rates, volumes, surface pressures and frac gradients.

### **RISK MANAGEMENT**

With respect to the identified geohazards relative to well design, assess the risk of induced or triggered seismicity. Consider local, background and documented seismic activity in the area.

### THIRD-PARTY FACILITIES

Audit, inspect and or confirm third-party disposal facilities using industry, trade or direct audit mechanisms to ensure those facilities have managed all risks relative to induced seismicity consistent with this mitigation plan.

### **MONITOR WELL OPERATIONS**

For both water disposal and hydraulic fracturing operations, monitor well conditions, including injection rates, pressures and cumulative volumes. Utilizing the traffic light approach, any detected or felt induced or triggered seismicity is grounds to stop work. Where appropriate, utilize available seismic or micro-seismic monitoring equipment which may include resources from the U.S. Geological Survey or National Resources Canada.



### **SAFETY**

Safety is a foundational value at Encana. From the office to the field, we strive to proactively identify and effectively control the risks associated with our operations and ensure our expectations are clearly communicated and adhered to by employees and suppliers. Ensuring the safety of our staff, suppliers, the public and the surrounding community is a basic tenet of managing our operations in a secure and efficient manner.



### **LIFE SAVING RULES AND STOP WORK PROGRAM**

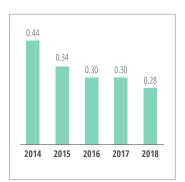
Encana provides a consistent approach in the prevention of serious injuries and fatalities through our life saving rules. A component of our Life Saving Rules program is a Stop Work program. Stop Work enables everyone involved with an

operation the authority and responsibility to stop a job without retaliation if they observe a situation that could impact people's safety or damage equipment. If at any time a life saving rule is compromised, employees

are trained to immediately engage the Stop Work program to prevent an incident. Our leadership universally endorses these safety programs, as they are core to Encana's culture.

### **OCCUPATIONAL HEALTH AND SAFETY**

### **ENCANA TOTAL RECORDABLE** INJURY FREQUENCY (TRIF)



TRIF is the number of recordable injuries per 200,000 exposure hours.

Our Occupational Health and Industrial Hygiene program is a specialized component of our overall safety initiative—focused on managing health hazards found in the workplace. The program is designed to help predict workplace exposures with a goal of preventing them before they happen. Our workforce are members of the community where we operate. Their diligence towards safe work practices translates to a more secure and healthier work environment and community.

### SURPASSING INDUSTRY STANDARDS IN SAFETY



In 2018, we delivered the company's safest year ever for the fifth consecutive year.



### DRIVING SAFETY

Motor vehicle incidents are the leading cause of injury and death in the oil and natural gas industry. Encana has a comprehensive internal driving safety program and safe vehicle operations practice that enables us to protect the health and safety of our workforce and the public. These programs encourage a zero-incident culture and gather data for better decisionmaking and risk evaluation.

To ensure safe driving, Encana's driver distraction practice prohibits the use of distractions such as cell phones and texting while driving a company vehicle or any vehicle engaged in company business. We also assign an in-vehicle monitoring system to all Encana fleet vehicles. These devices monitor and provide data on driver behavior, including hard braking, rapid acceleration and speed. These programs are delivering



results, in 2018, Encana only experienced one motor vehicle incident, down from two in 2017.

### **EHS INCIDENT MANAGEMENT**

Encana has a streamlined, efficient system for managing EHS incidents, audits and inspection information. Our incident management system is used to capture our environment, health and safety incident data including injuries and illness, motor vehicle incidents, spills and near hits for tracking, trending analysis and scorecard/performance management reporting.

### **HEALTH AND SAFETY** RISK MANAGEMENT

The following risk management objectives guide us in meeting our long-term health and safety (EHS) goals:

- Requiring the assessment and verification of suppliers working for us, or those offered an opportunity to bid on Encana work.
- Delivering, analyzing and using key metrics to drive sustained performance improvements.
- Providing safety leadership training to support a baseline safety culture at Encana.
- · Providing various tools to support the safety of our operations.

### **SUPPLIER MANAGEMENT**

Encana uses ISNetworld (ISN) to evaluate supplier safety programs and performance. Through ISN's online database, supervisors can verify that all suppliers are qualified to work for Encana. Once a supplier has been approved to work for Encana, routine spot checks and inspections are used to ensure that Encana's requirements are being met. Supplier environment, health and safety audits that include a tabletop review and potential field visit are frequently used to provide a detailed assessment of the supplier's EHS performance.



### **ETHOS**

Ethos<sup>25</sup> is Encana's operations management system structured with 12 standards stating how we conduct our business. At every level of the organization, these documented sets of principles defining our interdependent standards, practices, processes and procedures influence how we manage operational, occupational health, safety and environmental risks. Through the integration of Ethos Standards and Practices into our daily activities we promote an injury-free workplace, minimize our environmental impact, maintain our license to operate, and encourage a working culture that treats our neighbors with respect.

EXPECTATIONS AND PRACTICES	GOVERNED BY			
Company-wide policies, practices and guidelines	Board of Directors and Executive Leadership Team			
Ethos management system	CREHS Committee and Executive Leadership Team			
Guidance documents and standards	Operational EHS			
Operations/EHS practices	Operations/EHS directors and managers			
Procedures	Operating area leadership			

For more information on Ethos, visit our Health and Safety Policy.<sup>26</sup>



# **SOCIAL**

Our approach to social responsibility is a vital component of our engagement with our stakeholders. How we relate to our employees, our investors, the communities where we operate and the public policy arena, helps to drive a balance between Encana's economic growth and the welfare of society and the environment in the areas where we work.



# COMMUNITY **ENGAGEMENT**

We believe getting to know our neighbors in the communities where we live and work is a core strength of our community investment and engagement programs. By partnering with our employees, key stakeholders and other organizations, Encana contributes to the quality of community life in the areas where we operate.

Our community investment program is focused on three core areas aligned with our values: education, community life and environment, health and safety. Encana provides grants, sponsorships and in-kind donations to create strong partnerships with organizations and initiatives associated with our core values.

In the communities where we operate throughout North America, we have a dedicated community relations team focused on listening to the concerns of residents and key stakeholders. Our community relations team takes an active role in the communities where we operate by engaging directly with residents, stakeholders and local governments.

To learn more about our community investment and engagement programs, and to read about the tangible endeavors we are delivering in our communities, visit our community page. 27

### **2018 HIGHLIGHTS**



### **TOP CHARITY CATEGORIES:**



Human services



Health



Education

(27) www.encana.com/community/



### **WORKING AT ENCANA**

The world relies on our industry to produce the oil and natural gas everyone needs to heat their homes, power their cars and build the things that make our lives better. Getting oil and natural gas from the rocks far beneath us takes drive, innovation, collaboration and a relentless spirit. We get excited about finding and developing oil and natural gas, and the pivotal role these products play in our everyday lives.

Our people work hard to put their best ideas into action—making energy development more advanced, efficient and safer than ever before.

#### COMPENSATION

Our pay for performance compensation philosophy is anchored in the belief that our people should be rewarded for their individual contributions... and share in the company's success. To read more about our compensation approach, benefits and insurance and our Employee Children's Scholarship Fund, visit our human resources page.28

#### LEARNING AND DEVELOPMENT

Recruiting, developing and retaining our workforce is vital to our future success. Industry's move into resource plays has created an even greater demand for people with engineering,

geotechnical, land, operations and commercial skills, and places additional demands on field personnel and oilfield services. The range of development opportunities at Encana include general

business and technical training, leadership development and online learning programs. In 2018, 397 Encana employees participated in one or more formal leadership programs or workshops.

### **DEVELOPMENT MODEL**

Our approach to learning and development aligns to our business strategy and culture. We focus on developing the leadership, technical and business capabilities that matter most to Encana's success.

### WHY

- · Business strategies
- · Culture and values

#### WHAT

- Leadership capabilities
- · Technical capabilities
- · Business capabilities

#### HOW

**70**% ON-THE-IOB WORK EXPERIENCE



**10**% **FORMAL** 

COLLABORATION

### SAFETY TRAINING

Safety has always been a core value at Encana. We believe safety training and awareness programs are essential to maintaining our business and operational success. The competency of our workforce and their ability to understand and adhere to company and regulatory policies and requirements is paramount to a strong safety culture. We train our employees on the procedures they must follow to complete work safely. Our field employees are given an average of 63 hours of training—focused on recognizing and mitigating hazards. We also deliver more than 120 courses to our workforce—guiding them on the best methods to manage safety risks and prevent spills and releases to the environment. We are proud of our Safety Essential for Leaders program that emphasizes the importance of strong safety leadership. More than 3,000 supervisors have completed the program since 2010.

63 HOURS TRAINING PER 120



### **DIVERSITY AND INCLUSION**



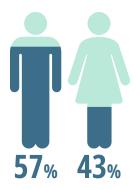
**GENDER DIVERSITY** 

All Colleagues

Senior Leadership Group

**Executive Leadership Group** 





**AGE DIVERSITY** 

2065 **EMPLOYEES** 

**EMPLOYEE DISTRIBUTION** 



65% 35%



### **HUMAN RIGHTS**

Encana is committed to providing a respectful, inclusive workplace 29 and a healthy, safe work environment free from harassment, discrimination, violence and intimidation. We do not discriminate based on gender, race, color, age, national origin, religion, disability, sexual orientation, marital status or any other characteristic protected by applicable laws. We respect fundamental human rights and view them as an integral part of corporate ethics and social responsibility. We adhere to the highest ethical conduct as outlined in Encana's Code of Conduct 30 in all aspects of our business. We operate on our foundational values of safety, trust, integrity

and respect.31 We apply fair labor practices throughout our operations and adhere to all applicable workplace, employment, privacy and human rights standards. Consistent with the United Nations Guiding Principles on Business and Human Rights,<sup>32</sup> Encana recognizes the responsibility of governments to protect and fulfill human rights. As a responsible operator, it is our obligation to respect human rights and comply with all applicable laws. Our commitment is consistent with the Universal **Declaration of Human Rights** and the International Labor Organization Declaration on Fundamental Principles and Rights at Work.33

Encana's commitment to the human rights, labor and indigenous policy provides a mechanism for anyone to report concerns or complaints through an anonymous, externally managed Integrity Hotline. Should any issues be identified, Encana will investigate, address and respond to such concerns. Violations of our human rights standards are serious offenses that may result in termination, penalties or other legal remedies. All Encana employees, contractors and directors are expected to adhere to this policy.



### RECOGNIZING THE RIGHTS OF INDIGENOUS/TRIBAL PEOPLES

Encana recognizes the unique rights of indigenous peoples and we work closely with the Nations to mitigate concerns and impacts. We maintain relationships with indigenous communities in the areas in which we operate and partner with multiple organizations with programs enhancing indigenous development. Our Indigenous Relations Guideline outlines our commitment to working with indigenous communities on economic development and community investment focused on wellness, education and cultural preservation. We recognize the United Nations Declaration on the Rights of Indigenous Peoples as it related to the interests of Indigenous Nations. Encana offers indigenous awareness training to all staff. As part of our community investment program, Encana provides financial support to community pow-wows, cultural camps and other initiatives where appropriate.

<sup>(30)</sup> www.encana.com/wp-content/uploads/2019/10/business-code-of-conduct.pdf

<sup>(31)</sup> www.encana.com/about/strategy/encana-values.html

 $<sup>(32)</sup> www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR\_EN.pdf$ (33) www.ilo.org/declaration/lang--en/index.htm



### POLITICAL **CONTRIBUTIONS** AND ADVOCACY

Encana believes active and constructive engagement in public policy is an important part of responsible corporate citizenship. We support trade associations, public policy organizations and academic research initiatives to inform public dialogue on issues impacting Encana and the oil and natural gas industry. Encana also actively engages with elected officials, regulatory agencies, legislative staff and the public. Our goal is to provide our perspective on key issues and to advocate for reasonable public policy and effective regulatory framework that enables responsible oil and natural gas development.

The laws and regulations

political contributions vary

by jurisdiction. Encana is

committed to the highest

ethical standards in our

governing lobbying and

advocacy efforts. In addition to following the applicable laws and regulations, Encana complies with the company's Political Activities Policy 34 and Business Code of Conduct. 35 The trade associations, public policy organizations and academic research initiatives to which we provided over US\$25,000 in funding to in

2018 are listed below:

American Exploration & **Production Council** 

Domestic Energy Producers of America

Permian Strategic Partnership

American Petroleum Institute

Energize for Safety Coalition (Oklahoma)

Texas Oil & Gas Association The Petroleum Alliance of

Bipartisan Policy Center

Independent Petroleum Association of America

U.S. Chamber of Commerce

Business Council of British Columbia

Institute for Energy Research

**Utah Petroleum Association** 

**Business Council of Canada** 

National Association of Manufacturers

Western Energy Alliance

Canadian Association of **Petroleum Producers** 

National Petroleum Council

Resource Works Society

Canadian Chamber of Commerce

Commerce

North Dakota Petroleum Council

Canada West Foundation

Denver Metro Chamber of

Permian Basin Petroleum

**IPIECA** 

Oklahoma

Association

For information regarding direct Encana contributions, please refer to the websites below.

U.S.

Federal lobbying disclosure-House

Federal Lobbying Disclosure-Senate

**New Mexico** 

North Dakota

Oklahoma

**Texas** 

**US Federal Election Commission** 

Utah

Wyoming

**CANADA** 

Alberta

**British Columbia** 

Canada Federal



# **PERFORMANCE**

2018

2017

2016

			2018	2017	2016		
NET ANNUAL PROD	UCTION	MBOE/D	361.2	313.2	352.7		
EMISSIONS							
GHG Intensity	metric tons CO <sub>2</sub> e / gross annual production		4		17.33	25.05	27.12
Methane Intensity	metric tons CH <sub>4</sub> / gross annual production		0.22	0.38	0.43		
Direct GHG Emissions <sup>1</sup>	metric tons CO <sub>2</sub> e		3,312,645	3,571,514	3,612,528		
Indirect GHG Emissions <sup>2</sup>	metric ton	ıs CO₂e	199,027.7	242,581.8	212,956		
Flared Gas³	(10³m³/yea	ar)	213,354	164,061	122,651		
Vented Gas	(10³m³/yea	ar)	33,904	43,141	52,141		
Nitrogen Oxides	metric ton	s/year	26,661	24,790	21,265		
Sulphur Dioxide	metric ton	s/year	10,718	8,836	7,744		
Methane Emissions	metric ton	s CH <sub>4</sub>	41,686	54,603	57,679		
WATER							
Fresh Water Intensity	m³/ gross production		43.05	74.06	47.01		
Water Intensity	m³/ gross annual production		75.68	99.51	67.18		
Total Water Use	MMbbls		91	89.24	56.29		
Fresh Water	MMbbls		52	66.41	39.39		
Alternative Water <sup>4</sup>	MMbbls		39.1	22.83	16.9		
PERSONAL SAFETY	•						
TRIF	Recordable per 200,00 recordable hours		0.28	0.3	0.3		
Recordable Injuries <sup>5</sup>	Workforce	2	63	64	54		
Fatalities	_		0	0	0		
Motor Vehicle Incidents	Based on threshold	internal	1	2	na		
SPILLS							
Regulatory Reportable Spills			49	59	65		
PEOPLE							
Total Staff <sup>6</sup>			2,065	2,107	2,200		
Gender Diversity <sup>6</sup>			65/35	65/35	65/35		

#### Footnotes

- 1) Emissions are calculated using locally regulated methodology or locally recognized industry standard. Emissions decreases due largely to divestitures.
- 2) Indirect emissions are based on electricity usage at facilities and vary depending on energy
- 3) Flaring increase due to increase in production and large gas volumes in Permian basin.
- 4) Alternative water includes saline, produced, recycled and reused water.
- 5) Recordable injuries include fatalities, permanent total disabilities, lost work cases, restricted work cases and medical treatment cases.
- 6) People data reflected in this chart are based off December 31, 2018 numbers.



### SUSTAINABILITY INFORMATION

The 2018 Encana Sustainability Report includes data from January 1, 2018, through December 31, 2018 and is focused on our direct operations as outlined in our 2018 Form 10-K. The topics addressed in this report are those that management believes have the potential to affect our sustainability performance, and their inclusion reflects the results of Encana's internal discussions and our engagement with key stakeholders. Our sustainability reporting process focuses on identifying and reporting issues of concern to our stakeholders and issues that potentially impact Encana's operations.

We look at Global Reporting Initiative, International Petroleum Industry Environmental Conservation Association, American Petroleum Institute and Disclosing the Facts to ensure that we are reporting by the most widely respected and utilized standards in our industry. Currently, we do not externally assure the report.

### **OUR PERFORMANCE**

Focusing on continuous improvement, our performance is frequently reviewed by leaders across the organization to assess our performance against internal goals and targets and to identify trends. Our teams analyze their performance and address concerns at the operational level.

### **CONTACT US:**

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