

## **TCFD REPORT** 2020

TSX BTE

# TCFD: CLIMATE-RELATED FINANCIAL DISCLOSURES

We believe that investors, insurers, and banks can make better decisions on the basis of improved climate-related disclosures. This year, **we have expanded our climate related disclosures**, in alignment with the Task Force on Climate-Related Financial Disclosures (TCFD).

We also respond annually to the **CDP** (formerly Carbon Disclosure Project) survey on greenhouse gas emissions and related programs. The CDP requests standardized climate change information from companies around the world through an annual questionnaire sent on behalf of more than 700 institutional investors with \$87 trillion in assets under management.



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## INTRODUCTION

Baytex Energy Corp. ("Baytex") is a North American-focused energy company based in Calgary, Alberta, with assets located in Canada and the United States. The Canadian operated segment includes light oil assets in the Viking and Duvernay, heavy oil assets in Peace River and Lloydminster as well as conventional oil and natural gas assets across Western Canada. The U.S. segment includes non-operated Eagle Ford assets in eastern Texas. Baytex's common shares trade on the Toronto Stock Exchange under the symbol BTE.

This document is one part of our suite of corporate disclosures, which includes our:

- » ESG Report (biennial)
- » CDP questionnaire
- » Annual Report and Financial Statements
- » Management's Discussion and Analysis
- » Annual Information Form
- » Information Circular
- » Extractive Sector Transparency Measures Act (ESTMA) Report

We believe that investors, insurers, and banks can make better decisions on the basis of improved climate-related disclosures. We are therefore expanding on our previous disclosures with this report, to further align with the Task Force on Climate-related Financial Disclosures (TCFD).





## TCFD: CLIMATE-RELATED FINANCIAL DISCLOSURES

#### I. Governance Of Climate-Related Issues

#### Board's oversight of climate-related risks and opportunities.

Our Board of Directors has four committees: the Audit Committee, the Human Resources and Compensation Committee, the Nominating and Governance Committee, and the Reserves and Sustainability Committee.

The Reserves Committee changed its name and mandate in 2019 to ensure sustainability-related matters had formal <u>oversight</u> at the Board level. The Reserves and Sustainability Committee has the highest level of oversight for sustainability-related matters, including health, safety, environment, climate, and other sustainability matters and is responsible for benchmarking, setting performance targets, and measuring progress and achievement against those targets. Specifically, in relation to climate change and the reduction of our company's GHG emissions, the committee provides oversight of policies and standards, reviews performance, and discusses future opportunities. This committee meets twice a year to review benchmarking, performance, and initiatives put in place to manage climate-related risks, reporting to the Board after each committee meeting.

The Reserves and Sustainability Committee is currently composed of three independent members of the Board, one of whom chairs the committee.

#### Management's role in assessing and managing climate-related risks.

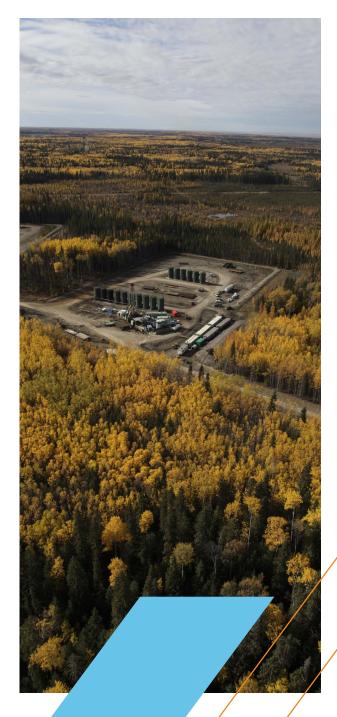
Our executive officers (management) report to the Reserves and Sustainability Committee and the full Board on environmental and social risks and opportunities. Executives are also responsible for approving budgets for the implementation of emission reduction plans and reviewing and approving the company's disclosures of the major risks faced by Baytex, which include climate-related risks.

Our efforts to reduce our emissions and manage climate-related risk are supported by two groups within the company, the Health, Safety, and Environment Committee and the Environmental Sustainability Team.

- The Health, Safety, and Environment Committee is composed of the Chief Executive Officer, General Counsel and Corporate Secretary, the Operations Vice Presidents, the Health and Safety Manager, and the Environment and Regulatory Manager. The committee reports to the Reserves and Sustainability Committee and the Board on issues related to health, safety, and environment. In relation to climate change and the reduction of the company's GHG emissions, this committee is responsible for the assessment and setting of our targets and the oversight of the preparation of our public disclosures of our performance in this area.
- » The Environmental Sustainability Team (EST) is a cross-functional team of employees and managers that are responsible for reporting climate-related issues and initiatives to individuals in two key executive leadership roles: Vice President, Light Oil, and Vice President, Heavy Oil. The EST is responsible for monitoring, implementing, and managing systems required to support climate-related initiatives. See page 13 for details.

#### LINKING ESG TO COMPENSATION

ESG matters form part of our annual budget and performance objectives, which are monitored and reported on regularly. For many years, we have included safety and spill metrics as part of our scorecard. In 2020, we incorporated our GHG emissions intensity target into our short-term incentive plan scorecard. This compensation applies to our executive team and all employees.



### II. Risk Identification and Integration

#### Organization's processes for identifying, assessing, and managing climate-related risks.

We evaluate a variety of risks to our organization, including climate and transition-related risks. Risks that could have a material future adverse effect on the value and amount of our reserves and on the operations, financial condition, and future sustainability of the business are considered substantive by the company. Our approach to risk management includes:

#### **RISK IDENTIFICATION**

Baytex has monthly, quarterly, and annual long-range planning review and reporting processes in place as well as ongoing risk assessments within business practices. When climate-related risks directly impact a sector of the company or a business procedure, a specific risk assessment and mitigation planning process will be undertaken. For example, emerging GHG emission regulations and changes to existing regulations are assessed by the Environmental Sustainability Team to understand the current and future impacts on the business. Findings and recommendations are communicated to the executive management team and the Reserves and Sustainability Committee.

#### **RISK INTEGRATION INTO FINANCIAL PLANNING PROCESSES**

Once climate-related risks have been identified, we incorporate them into four different aspects of our business:

- » **Operating Costs:** We conduct financial analysis on the potential increase to operating costs in jurisdictions with carbon pricing schemes, including factors such as compliance costs for carbon pricing and the operations and maintenance of GHG mitigation infrastructure.
- » Capital Expenditures and Capital Allocation: We factor opportunities to reduce energy consumption, reduce emissions, and ensure regulatory compliance into our capital budget. We also evaluate the economics of gas conservation or mitigation projects, consider the costs and benefits of such initiatives, and track project costs and subsequent performance. The availability of government grants to lower the capital expenditures of emissions reduction or new energy projects is also a consideration.
- » Acquisitions and Divestments: When Baytex evaluates acquiring or divesting of assets, we consider the emissions intensity of the assets and the transaction's potential impact on the company's emissions profile. Our management team also considers the potential financial impacts that acquired properties may have in terms of future emissions intensity reduction initiatives and compliance costs.
- » **Revenues:** A long-term supply or demand disruption could have a meaningful positive or negative impact on our sales revenues. Read more about carbon pricing and demand modeling on page 46.



## III. Strategy

#### Climate-related risks and opportunities and their impact, as identified over the short, medium, and long-term.

In alignment with TCFD recommendations, we identify two types of climate-related risks: (1) physical risks, which are risks associated with the physical impacts from climate change, and (2) transition risks, which are regulatory and business risks related to the transition to a lower-carbon economy. We also evaluate their impact on our company, qualitatively or quantitatively, and implement actions to mitigate that impact.

| PHYSICAL RISKS          |  |   |  |
|-------------------------|--|---|--|
| Category                | Explanation  | Impact mechanism and potential impact on Baytex   | What do we do to mitigate impacts  |
| Acute physical (Canada) | Severe weather events that<br>could impact our operated<br>properties in Western Canada<br>include flooding, wildfires,<br>heavy precipitation events, and<br>extreme temperatures.  | Decreased revenues due to reduced production capacity.<br>Damage to assets.<br>In the past the company has had to temporarily shut-in production<br>due to flooding and wildfires.  | The geographic dispersion of our assets helps<br>mitigate the potential impact on our physical<br>assets.<br>For our operated assets, where there could be   |
| Acute physical (U.S.)   | Tropical cyclones can impact<br>production and refining capacity<br>in various offshore producing<br>regions (e.g., U.S. Gulf Coast).<br>This could directly impact our<br>non-operated properties near<br>San Antonio, Texas, in the Eagle<br>Ford Basin. | Positive or negative impact on commodity prices resulting from<br>supply and/or demand disruptions.<br>A longer-term supply or demand disruption could have a<br>meaningful impact on the company's revenues.<br>Due to the uncertain nature of these risks, we have not completed a<br>financial analysis. | <ul> <li>an impact, we:</li> <li>Have systems that allow for the rapid<br/>implementation of emergency response<br/>measures.</li> <li>Have contingencies to reroute production<br/>to sales via trucks and rail if required.</li> <li>Participate in wildfire control planning<br/>and emergency response exercises.</li> </ul> |
| Chronic physical        | Precipitation events and<br>temperature extremes (atypically<br>hot and atypically cold events).   | We do not anticipate that moderate changes to temperature or<br>precipitation would result in a material impact to our assets or<br>operations.   | <ul> <li>Have business interruption insurance for<br/>key infrastructure and property insurance<br/>coverage on larger facilities.</li> <li>For our non-operated assets:</li> <li>We carry general liability insurance to</li> </ul>   |
|                         |  |   | <ul> <li>The Eagle Ford asset is managed by<br/>a reputable operator with emergency<br/>responses measures in place. We maintai<br/>a strong working relationship with the<br/>operator of the asset.</li> </ul>   |

| Category               | Explanation  | Impact mechanism and potential impact on Baytex  | What do we do to mitigate impacts   |
|------------------------|--|--|---|
| Current<br>regulation  | Canadian provincial and federal regulations on carbon, as well   | Carbon pricing in Canada is currently set to<br>escalate from \$30 per tonne in 2020 to as high<br>as \$170 per tonne by 2030. There are direct costs<br>as well as inflationary influences on the costs<br>of services and products as the cost of carbon<br>increases.<br>Registering our facilities in performance standards<br>limits the financial exposure to an estimated \$1<br>million at \$30 per tonne. | » Our risk assessments take into account the current legislative methane and emission requirements.   |
|                        | as methane regulations in<br>Alberta and Saskatchewan,<br>impact our operating cost and  |  | » We are registered in performance standards in Alberta and Saskatchewan that<br>significantly lower our direct costs and financial exposure to carbon pricing in<br>our operations.  |
|                        | business plans. Read more on the next page.  |  | » We monitor and report on our emissions performance to ensure our compliance with regulatory limits.   |
|                        |  |  | <ul> <li>Emissions reduction initiatives are focused on maintaining compliance in a<br/>tightening regulatory environment and reducing financial exposure to carbon<br/>pricing in the future.</li> </ul>   |
|                        |  |  | » We set emissions reduction targets to ensure our continued compliance with methane regulations and to lower our financial exposure to carbon pricing.   |
| Emerging<br>regulation | Tightening methane regulations<br>in future years may require  | Additional future costs will be associated with equipment, projects, monitoring, and reporting.  | » We maintain an emissions database which is used for regulatory filings. It is also used for internal reporting and analysis of GHG emissions.   |
|                        | additional equipment,<br>equipment upgrades, GHG<br>reduction project planning, air<br>monitoring, and other reporting<br>requirements.                          | Resourcing needs and third-party costs are<br>evaluated on a project basis and as additional<br>needs arise.   | » We regularly review emerging GHG regulations and participate in government/<br>industry working groups to (1) provide input into the regulations as they are<br>being developed and (2) better understand the future impact the regulations<br>will have on the company.  |
|                        |  |  | » We use internal staff where possible to undertake planning, evaluation, operations,<br>and reporting activities. This includes the Environmental Sustainability Team,<br>facilities engineering, operations, and sustainability reporting.  |
|                        |  |  | » We engage specialized third parties when needed in areas of environmental<br>engineering, verification, measurement, and grant writing.   |
|                        |  |  | » We monitor and report on regulatory compliance limits within new or tightened regulations to ensure compliance.   |
| Technology             | Technology risks include (1) the<br>risk of not utilizing appropriate<br>technology to mitigate  | Technology development is evaluated on a project<br>basis, along with the availability of government<br>grants.  | » We invest in various technologies aimed at reducing our GHG emission intensity.<br>These technologies are trialled in smaller pilot projects before being deployed<br>on a large scale.   |
|                        | emissions and (2) the risk of not<br>having appropriate emissions<br>technology available (i.e., still<br>in development stage and not<br>ready for deployment). |  | » To remain current on technology and innovation we have an internal technology<br>bulletin board. Employees collaborate on technological developments,<br>including emissions reduction opportunities. Staying current and encouraging<br>collaboration within the company and with peers reduces our technology<br>related risks. |
| Market                 | Market impacts of perceived<br>inaction or insufficient action<br>on climate change.   | In the future for a company to be a reputable participant in the market, meaningful action on climate change is required.  | <ul> <li>We report emissions to the CDP, the National Pollutant Release Inventory<br/>(NPRI), and the EPA using the Electronic Greenhouse Gas Reporting Tool<br/>(e-GGRT).</li> </ul>   |
| Reputation             | Climate change issues are important to our investors and   | Social perceptions of our industry could impact our social license to operate or ability to access   | » Emissions management and the potential impacts of climate change are<br>becoming increasingly integrated in our business strategy.  |
|                        | residents in the communities   | financing.   | » We maintain an emissions tracking database.   |
|                        | where we operate.  |  | » Our teams work continuously to improve processes related to emissions data compilation and internal reporting.  |
|                        |  |  | » We review non-routine flaring, venting, and fugitive emissions activities.  |

#### **Current GHG Regulations**

The GHG-limiting regulations most relevant to our company are:

#### **1) CARBON PRICING SYSTEMS**

**Federal Greenhouse Gas Pollution Pricing Act:** In 2018, the federal Greenhouse Gas Pollution Pricing Act came into effect in Canada. The Act implements a federal benchmark carbon pollution pricing system applied to fuel and combustible waste. This federal pricing impacts provincial jurisdictions that do not have an equivalent Output-Based Pricing System in place. The Provinces of Saskatchewan and Alberta, where we have operations, have obtained federal equivalency, which determines our financial exposure to the federal fuel tax. These programs have associated compliance costs when performance standards relative to an emissions benchmark cannot be fully met.

Compliance costs differ by province depending on the performance standard requirement and compliance cost rate.

#### 2) OUTPUT-BASED PERFORMANCE STANDARDS

**Saskatchewan Output-Based Performance Standard (OBPS):** This regulation applies to facilities emitting more than 25,000 tonnes of  $CO_2e$ . Although optional, we have elected to register our Kerrobert SAGD facility, even though it is under this threshold. The remainder of our facilities do not meet the large emitter criteria, however, we chose to opt into the regulation by aggregating all other operated Saskatchewan assets. This program requires an annual 1.25% reduction in stationary combustion emissions escalating to a total 15% reduction by 2030 when compared to a 2019 baseline. In 2020, our compliance costs were \$0.1 million at \$30 per tonne of  $CO_2e$ .

**Alberta Technology Innovation and Emissions Reduction (TIER):** This regulation applies to facilities that emit more than 100,000 tonnes of CO<sub>2</sub>e. None of our facilities meet these criteria; however, we chose to opt in and registered our operated facilities in a conventional oil and gas aggregate. The Alberta reduction requirement is 10% immediately from a 2020 benchmark year. In 2020, compliance costs were \$0.9 million.

#### **3) METHANE REGULATIONS**

**Saskatchewan Oil and Gas Emissions Management Regulations (OGEMR):** The focus of OGEMR is to reduce methane emissions by 40% between 2020 and 2025. The regulation requires companies to reduce venting and flaring volumes as they are significant contributors to methane emissions. To calculate allowable emissions, operators must calculate the ratio of actual GHG emissions emitted from a site relative to the potential theoretical emissions that would occur if all the associated gas on a site was vented. Regulations came into effect on January 1, 2019, with emissions limits starting in 2020 and the final target being reached by 2025. Unlike other regulations, like the carbon pricing systems, there is no payment option to allow for not meeting reduction targets. Companies must achieve annual methane emissions targets or face regulatory penalties. We have reduced our venting volumes significantly and exceeded the regulatory required reduction for 2020.

<sup>1</sup> Net is from Baytex's equity share of the production

<sup>2</sup> Gross includes all the operated facility volumes including production that belongs to our joint venture partners

**Alberta Methane Emissions Reduction Program:** This program includes suite of fleet and site-specific regulations focused on the reduction of venting and fugitive emissions at upstream oil and gas sites. Elements of the program include Fugitive Emissions Management Plans (FEMP) and the Methane Reduction and Retrofit Compliance Plan (MRRCP), which obligates operators to swap out higher venting equipment and implement routine venting limits for all sites. We were compliant when these regulations came into effect on January 1, 2020 and anticipate remaining compliant as the program requirements grow more stringent over time to 2023.

**Alberta Directive 084:** Directive 084 was created in response to the January 2014 Peace River Hearings to address odours and emissions generated by heavy oil operations in the Peace River region (Three Creeks, Walrus, Seal Lake, and Reno). Starting in 2018, companies operating in the Peace River region have been required to conserve 95% of all gas produced. This required conservation rate excludes non-routine flaring. In 2020, our gas conservation rate in the region was 96.9% net<sup>1</sup> routine gas conservation rate (92.8% gross<sup>2</sup> routine gas conservation).

|                           | 2019 | 2020 | 2021 | 2022 |
|---------------------------|------|------|------|------|
| Carbon pricing (\$/tonne) | \$20 | \$30 | \$40 | \$50 |

Federal fuel rates under the Greenhouse Gas Pollution Pricing Act.

## Resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

In the next two years, we plan to complete a scenario analysis to support our understanding of the implications of the energy transition on our business. While we have not implemented a comprehensive climate-related scenario analysis into our business strategy, we have taken the following two steps to evaluate the impacts of some of our most direct climate-related risks:

- » Forecasting GHG emissions: The implementation of emissions reporting software in 2019 has provided greater visibility and insight into the emissions intensity of our corporate portfolio, area assets, and individual facilities' emissions performance. This aids in forecasting future corporate emissions, identifying reduction initiatives, and assessing future acquisition and divestiture opportunities as they relate to emissions. We forecast our emissions under our current development plan to ensure our compliance with regulatory limits and execution of GHG reduction initiatives. This provides a corporate profile of emissions and emissions intensity to management to aid in decision-making and emission reduction project planning.
- » Modeling changes in oil prices and demand: Our five-year outlook corporate modelling incorporates various benchmark oil pricing scenarios. This aids in assessing the resiliency of the business to market fluctuations under various development scenarios. In 2020, we saw unprecedented low crude oil prices and demand drop. Baytex responded to these changes quickly with a revised capital program that optimized the value of our resource base. Our flexibility in these circumstances highlighted our ability to respond to a demand disruption in a shorter-term scenario. The nature of longer-term supply or demand disruption is uncertain in nature.

At Baytex, we believe that oil and gas will be instrumental in the energy transition. Some of the elements that make our company more resilient are:

- » Geographical diversity: We are exposed to different regulations in the various jurisdiction where we operate. In 2020, 39% of our production came from non-operated assets in the U.S. with no exposure to carbon pricing or methane regulations. Our Canadian production is split between the provinces of Alberta and Saskatchewan that also have different regulations. Geographic dispersion also makes us more resilient to the physical risks of climate change since they affect regions differently.
- » **Lower cost producer:** To increase our financial resiliency, we aim to increase our productivity and reduce our costs. Across our properties, we apply technical advancements that drive enhanced productivity such as extended reach horizontal wells in our Viking assets and multi-lateral development in Peace River. We have a disciplined capital spending program, and in 2020 we also met our cost targets despite an extremely volatile pricing environment.
- » A track record of implementing GHG regulations: There are administrative and reporting requirements associated with maintaining good standing in the regulations that apply to our business. We have invested in methane and GHG emission reduction across our properties to reduce this impact (see pages 10-13). Our Peace River assets are subject to some of the most stringent regulations in Canada and we consistently meet or exceed our obligations. We have applied learnings from Peace River in developing and implementing our plans for our Viking assets, showcasing our organizational adaptability and the resilience our of teams.
- » Active in industry groups and GHG regulatory discussions: We actively participate in industry groups and engage with regulatory bodies in Alberta and Saskatchewan on the implementation of federally equivalent Output-Based Performance Standard programs. We monitor and review developments in provincial and federal carbon pricing policies and the implementation of carbon pricing schemes.

In the next two years, we plan to complete a scenario analysis to support our understanding of the implications of the energy transition on our business.

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#### IV. Metrics and Targets

#### Metrics used to assess climate- related risks and opportunities in line with strategy and risk management process.

We have measured and reported our controlled GHG emissions (scope 1 and scope 2) since 2012. Read more about how we manage our GHG emissions on pages 10-13 of our ESG report.

| GHG Emisssions (tonnes CO <sub>2</sub> e)     | 2016      | 2017    | 2018      | 2019      | 2020      |
|---|-----------|---------|-----------|-----------|-----------|
| Scope 1                                       | 972,834   | 805,018 | 2,739,887 | 2,230,163 | 1,188,227 |
| Scope 2                                       | 30,810    | 50,731  | 102,703   | 112,475   | 89,642    |
| Total GHG Emissions                           | 1,003,644 | 855,749 | 2,842,590 | 2,342,638 | 1,277,869 |
| GHG emissions intensity (tonnes $CO_2e/boe$ ) | 0.082     | 0.070   | 0.112     | 0.095     | 0.061     |

**GHG targets:** As the majority of our climate-related risks stem from regulatory uncertainty and the potential impacts on our capital and operational expenditures, our targets focus on reducing our GHG emissions. In order to mitigate increased carbon pricing and proactively address federally imposed emissions reductions, in 2018 we set a target to reduce our GHG intensity by 30% from our 2018 baseline. Having met and exceeded that target, we have set a new target to reduce our GHG intensity by 65% by 2025 from our 2018 baseline.

Note: The increase in emissions from 2017 to 2018 is due to the acquisition of our Viking assets.





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