Welcome to your CDP Climate Change Questionnaire 2019

C0. Introduction

C0.1

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

Baytex Energy is an oil and gas corporation based in Calgary, Alberta, Canada. We are engaged in the acquisition, development and production of crude oil and natural gas in the Western Canadian Sedimentary Basin and in the Eagle Ford in the United States. Approximately 83% of our production is weighted toward crude oil and natural gas liquids. Our common shares trade on the Toronto Stock Exchange and the New York Stock Exchange under the symbol BTE. On August 22, 2018, Baytex Energy and Raging River Exploration completed a strategic combination, which resulted in a meaningful increase to our light oil assets.

Our crude oil and natural gas operations are organized into three business units: 1) tight oil, which includes the Eagle Ford in Texas (non-operated) and the Duvernay in Alberta, 2) light oil, the Viking in Saskatchewan and 3) heavy oil, which includes Peace River and Lloydminster in Alberta and Saskatchewan. These business units have a portfolio of mineral leases, with operated and/or non-operated properties and development prospects. Within the business units, Baytex has established geographically-organized teams with a full complement of technical professionals (engineers, geoscientists and landmen). This comprehensive technical approach is intended to result in thorough identification and evaluation of exploration, development and acquisition opportunities and cost-effective execution of those opportunities. We endeavour to add value through internal property development and selective acquisitions.

We believe that by acting as a responsible company in all aspects of our operations, not just financial, we create long-term value for all stakeholders. We focus on employee opportunities for personal growth, an improved quality of life in communities where we operate, business opportunities for Aboriginal groups, and an attractive return on investment for shareholders. More broadly, society benefits from environmentally-responsible development that produces reliable energy at a reasonable cost. We can assure you that our values-based focus on environmental protection and the well-being of communities and employees is supported by strong ethics.

Developing oil and gas resources requires long-term commitment and cooperation. A large group of stakeholders are important to achieving continued long-term success in resource development. In the fall of 2019, we will issue our fourth Corporate Social Responsibility report.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Row 1	January 1, 2018	December 31, 2018	No

C0.3

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

Canada

C0.4

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

CAD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

C-OG0.7

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

Row 1

Oil and gas value chain

Upstream

Other divisions

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Director on board	Baytex's Health, Safety & Environment Committee is comprised of the Chief Executive Officer, Chief Operating Officer, General Counsel and Corporate Secretary, Business Unit Vice Presidents and HSE Manager. The committee assists the Board with its responsibility for due diligence by making recommendations to the Board in relation to the development and implementation of policies and standards for Health, Safety & Environment matters. This includes the review of and discussion about Baytex's progress in relation to climate change, reduction of carbon footprint and future opportunities. This committee meets quarterly and reviews initiatives that are put in place to manage climate related risks and reports to the Board as important matters arise.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring	Health, safety and environment forms part of our annual budget and performance objectives, which are monitored and reported on regularly. In alignment with the Task Force on Climate-related Financial Disclosures (TCFD), we have identified two types of climate-related risks: 1) physical risks, which are risks associated with physical impacts from climate change, and 2) transition risks, which are regulatory and business risks related to the transition to a lower-carbon economy.

	implementation and performance of objectives	Management presents to the Board on these topics, provides guidance, approves budgets for the plans to be implemented and reviews and approves the company's disclosures of the major risks faced by the company which include climate related issues.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Chief Operating Officer (COO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify Vice President, Operations	Both assessing and managing climate-related risks and opportunities	As important matters arise
Environmental, Health, and Safety manager	Both assessing and managing climate-related risks and opportunities	As important matters arise

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Baytex's Health, Safety & Environment Committee is comprised of the Chief Executive Officer, Chief Operating Officer, General Counsel and Corporate Secretary, Business Unit Vice Presidents and HSE Manager. The committee assists the Board with it's responsibility for due diligence by making recommendations to the Board in relation to development and implementation of policies and standards for Health, Safety & Environment matters. This includes the review of and discussion about Baytex's progress in relation to climate change, reduction of carbon footprint and future opportunities. This committee reviews initiatives that are put in place to manage climate related risks and reports quarterly to the Board.

C1.3

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

Yes

C1.3a

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

Who is entitled to benefit from these incentives?

Corporate executive team

Types of incentives

Monetary reward

Activity incentivized

Other, please specify

Achievement of business objectives and regulatory compliance.

Comment

The executive team is evaluated based on the achievement of corporate objectives and goals, which includes regulatory compliance. These objectives are endorsed by the board and reported externally through annual reports and our Corporate Social Responsibility Report.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Monetary reward

Activity incentivized

Other, please specify

Regulatory compliance and implementation of major GHG reduction projects.

Comment

In all jurisdictions where Baytex operates, there are emission regulations and/or targets. Our annual performance assessment for all employees incorporates compliance or adherence to these regulations and targets. In 2018, Baytex completed a multi-year gas conservation project, which included the construction of gas gathering, pipelines, storage, truck loading scrubbers and a gas processing and sales facility. Many of the key employees associated with this initiative received internal recognition and monetary rewards.

C2. Risks and opportunities

C2.1

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

	From (years)	To (years)	Comment
Short-term	1	3	Aligns with regular business practices.
Medium-term	3	10	Aligns with regular business practices.
Long-term	10	20	Aligns with regular business practices.

C2.2

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

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

C2.2a

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

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	Aligns with regular business practices.

C2.2b

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

1. Baytex's risk management is integrated into the core areas of the business (operations, finance, joint venture, marketing and transportation) including long-term development plans and evaluating risks associated with current operations.
2. Risks and opportunities are assessed and communicated to senior officers and other stakeholders (land owners, regulators, investors, general public and industry groups). Risks and opportunities identified include regulatory and reputation consequences.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Our risk assessments take into account the current legislative requirements for methane and emission requirements. Our company philosophy is to always meet or exceed regulatory compliance requirements.
Emerging regulation	Relevant, sometimes included	Regular review of emerging GHG regulations and participation in government / industry working groups to: 1) provide input into the regulations as they are being developed and 2) better understand the future impact the regulations will have on the company.
Technology	Relevant, sometimes included	The impact of technology on lowering GHG emissions and helping to reduce the intensity of emissions is assessed. Technology risk can be viewed in a number of ways, from the risk of not utilizing appropriate technology to mitigate emissions through to the risk of not having appropriate emissions technology available (i.e. still in development stage and not ready for deployment).
Legal	Not evaluated	Currently not formally evaluated.
Market	Not evaluated	Currently not formally evaluated.
Reputation	Relevant, sometimes included	Baytex is aware that climate change issues are important to our investors and residents in the communities where we operate. As a result, how the company manages emissions and the potential impacts of climate change is becoming increasingly integrated in business strategy. We voluntarily report emissions to the CDP, National Pollutant Release Inventory (NPRI), and to the EPA using the Electronic Greenhouse Gas Reporting Tool (e-GGRT). We are implementing an emissions tracking database and improving processes related to emissions data compilation and internal emissions reporting. As well, using 2018 as a baseline, Baytex has set formal corporate emissions intensity reduction targets.
Acute physical	Relevant, always included	Our operated oil and gas operations are located in western Canada. Our field operations could be impacted by severe weather events including flooding, wildfires, lightening and tornadoes. In the past the company has had to temporarily shut-in production due to flooding and wildfires. We have business interruption insurance for key infrastructure and property insurance coverage on larger facilities. These risks are largely unpredictable and uncontrollable, however Baytex does have systems in place that allow for the rapid implementation of emergency response measures and contingencies to reroute production to sales via trucks and rail if required. In addition, Baytex participates in wildfire control planning and emergency response exercises.
Chronic physical	Relevant, always	When contemplating climate-related risk Baytex considers the effects of increasingly frequent extreme weather events on its operations and

	included	physical infrastructure. Examples would include wild fires, heavy precipitation events and temperature extremes (atypically hot and atypically cold events). All of the above mentioned risks, while unpredictable, can cause material disruptions to production operations. As such, systems have been put in place that allow for the rapid implementation of emergency response and contingency plans designed to mitigate the impact of severe weather events.
Upstream	Not evaluated	Currently not formally evaluated.
Downstream	Not evaluated	Currently not formally evaluated.

C2.2d

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

1. Baytex's risk management is integrated in the core areas of the business (operations, finance, joint venture, marketing and transportation) for long-term development plans and evaluating risks associated with current operations.
2. As risks and opportunities are identified they are communicated to senior officers and other stakeholders (land owners, regulators, investors, general public and industry groups). Examples of climate-related risk would include rapid changes to emissions regulations and reputation consequences associated with corporate emissions.
3. Risks and opportunities are also assessed at the asset level. Site designs are continuously being evaluated and improved upon based on operational learnings.
4. Baytex utilizes third party expertise to quantify and monitor its emissions profile. Emissions data is reported publicly through the National Pollutant Release Inventory (NPRI), the CDP and our Corporate Sustainability Reporting.
5. Baytex has implemented a formal GHG emissions reduction program using 2018 as the baseline year.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Our oil and gas operations are located in western Canada and the state of Texas in the United States. Examples of extreme weather events would include wild fires, heavy precipitation events, flooding and temperatures extremes. These events, while unpredictable, can cause material disruptions to production operations and damage to physical infrastructure.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Due to the unpredictable and short-term nature of these risks, a financial analysis has not been completed.

Management method

These risks are largely unpredictable and uncontrollable, however Baytex does have contingencies in place to reroute production to sales via trucks and rail if required. In addition, Baytex participates in wildfire control and emergency response planning.

Cost of management

0

Comment

Costs are not easily quantifiable, but are manageable under most circumstances.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Supply chain

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact

Reduced demand for products and services

Company- specific description

Tropical cyclones can impact production and refining capacity in various offshore producing regions (example: US Gulf Coast). This can have a positive or negative impact on commodity prices resulting from supply and/or demand disruptions. Based on our business, the impact is direct with our operations near San Antonio in the Eagle Ford Basin, in that it may impact production and sales revenues.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

A longer term supply or demand disruption could have a meaningful impact on the company's sales revenues. Due to the uncertain nature of these risks, a financial analysis has not been completed.

Management method

These risks are largely unpredictable and uncontrollable, however Baytex has commodity price risk management policies and tools in place.

Cost of management

0

Comment

There are no direct costs.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Increased pricing of GHG emissions

Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

In 2018, the federal Greenhouse Gas Pollution Pricing Act come into effect in Canada. The Act implements a federal benchmark carbon pollution pricing system applied to fuel and combustible waste. The federal tax rate is $10/tonne CO2e in 2018 and increases $10/tonne annually to $50/tonne in 2022. This federal backstop pricing impacts provincial jurisdictions that do not have an equivalent pricing system in place. The backstop program did not apply to any provinces during the 2018 calendar year. On April 1, 2019 the federal backstop program took effect in the Province of Saskatchewan. On January 1, 2020 the federal backstop program will take effect in the Province of Alberta. Baytex currently estimates the 2019 impact of the increased pricing of GHG emissions to be $3 million. The financial impact in 2020 and into the future will be impacted by the development of Output Based Performance Standard programs by the Provinces, and their ability to achieve federal equivalency for these programs.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Management method

Baytex is actively participating with regulatory bodies and industry groups in Alberta and Saskatchewan on the development of federally equivalent Output Based Performance Standard Programs. These programs, OBPS in Saskatchewan and TIER in Alberta, would significantly limit the company's exposure to the federal carbon tax. Oil and gas facilities under their auspices would not be subject to the federal carbon tax when performance standards are met or exceeded. Baytex will apply to have its producing sites included in the offset programs as they are developed by both provinces. In the jurisdictions Baytex operates, management monitors and reviews developments to provincial and federal carbon pricing policies and the implementation of carbon pricing schemes.

Cost of management

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Technology: Unsuccessful investment in new technologies

Type of financial impact

Capital investments in technology development

Company- specific description

Baytex actively invests in various technologies aimed at reducing our GHG emissions intensity. The technologies we invest in are both proven and unproven and, as such, some degree of risk exists where certain technologies ultimately do not meet our expectations.

As we work towards reducing our GHG emissions capital is deployed, and can sometimes be lost, as projects utilizing new technologies are implemented. In order to minimize this risk, and ensure the most efficient means of GHG reduction, these technologies are trialed in smaller pilot projects before being deployed on a large scale.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Management method

The process of investing in new and existing technologies aimed at reducing GHG emissions and emissions intensity is one Baytex is committed to. To reduce the risk of investing heavily in technologies that are ultimately unsuccessful, Baytex ensures smaller scales trials of all new technologies (or new applications for existing technologies) proceed ahead of investing in larger scale deployment.

Cost of management

2,000,000

Comment

Baytex considers the capital invested in trials and testing new technologies to be a means of reducing our cost exposure on a longer term time horizon. Investing, understanding, and finding better ways to reduce emissions today, allows us to more effectively set and meet GHG related targets going forward.

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Other

Type of financial impact

Other, please specify

Regulatory Uncertainty

Company- specific description

Regulatory uncertainty exists in the Canadian oil and gas sector as new climate-related regulations are announced and come into force. In Canada the regulation of energy and natural resources, including environmental impacts, are shared between the federal and provincial governments. The Provinces take responsibility for energy and natural resources within their boundaries and have bodies to govern these activities. Methane reduction regulations announced by the Government of Canada have short implementation timelines. The Provinces of Alberta and Saskatchewan continue to work towards obtaining federal equivalency for the regulations developed by their government bodies. Initial methane reduction standards come into effect January 1, 2020 and it is difficult to determine which sets of regulations will operationally apply to Baytex, and when. We continue to monitor ongoing developments and proposed regulations to ensure regulatory compliance can be achieved.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Management method

Baytex's risk assessments take into account the current legislative requirements for methane and emission reduction requirements. Our company philosophy is to always meet or exceed regulatory compliance requirements. Emerging GHG regulations are regularly reviewed and Baytex participates in government and industry working groups. This ensures the opportunity to provide input into the regulations as they are being developed, and ensures a better understanding of the future impact of regulatory changes.

Many existing processes and systems can be leveraged to implement regulatory changes. For example, Baytex's Peace River operations fall under Directive 84 and a fugitive emission monitoring program is in place. A system was implemented internally to schedule inspections and store inspection data for regulatory reporting. Operational learnings and processes can be leveraged in other asset areas as new federal or provincial regulations pertaining to fugitive emissions come into effect.

Cost of management

Comment

Management evaluates the costs of improvements to current systems or the necessity of implementing new applications and processes to ensure regulatory compliance. Direct operating cost impacts and capital investment requirements related to regulatory compliance activities are considered and budgeted for. For example, compliance with Directive 84 requirements in the Peace River operating area required capital investments which were included in the capital budget and gas conservation project costs were tracked.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Type of financial impact

Other, please specify

Increased conservation of gas associated with heavy oil production.

Company-specific description

In July 2018, construction and engineering was completed on a new gas plant in the Peace River Region. This facility was specifically designed to process associated gas (gas that is co-produced with oil) that would otherwise have been flared. The delivery of excess natural gas production to the Harmon Valley Gas Plant eliminates the emissions of more than 146,000 tonnes CO2e from flaring per year. While sales gas produced from this facility will ultimately be burned, it will have been put to beneficial use (i.e. heating homes) as opposed to being flared as a waste product. The facility is designed for a minimum 20 operational year life-span, during that time, for Baytex, this project could eliminate 3.86 million tonnes CO2e from flaring.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

22,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Financial implications for this project are expected to be approximately $22 million in capital, this is to account for the design & construction of a centralized gas plant and infrastructure required to tie-in the system for the sale of excess natural gas.

Strategy to realize opportunity

A number of gas conservation options were considered (including gas fired electricity generation and gas storage) however a centralized gas plant was deemed the best option from a financial, execution and operational perspective.

Cost to realize opportunity

22,000,000

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Type of financial impact

Other, please specify

Viking Gas Conservation Project

Company-specific description

In August 2018, Baytex Energy merged with Raging River Exploration. The legacy Raging River Viking light oil assets are predominately centralized in the Kindersley, Saskatchewan area where there is limited gas conservation infrastructure in place. For the baseline year 2018, the Viking assets emitted 1,437,279 tonnes CO2e with an intensity of 0.177 tonnes CO2e per BOE. Baytex has identified an opportunity on these acquired assets to decrease venting, increase gas conservation, reduce emissions intensity and ensure compliance with methane reduction regulations.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Strategy to realize opportunity

Ongoing initiatives in the Viking will include: installation of combusters/flare stacks at higher emission sites, increasing capacity of current gas conservation infrastructure, power generation, new multi-well pad site development, evaluation of new gas conservation projects and selective venting.

Cost to realize opportunity

25,000,000

Comment

The Viking GHG reduction initiative will impact current operations and future development plans. It is currently estimated that $20 - $25 million will be invested in reducing the emissions intensity of the Viking assets from 2019 to 2021. Evaluation will be ongoing as technologies are deployed and gas conservation projects are assessed.

C2.5

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

	Impact	Description
Products and services	Impacted for some suppliers, facilities, or product lines	Pricing of GHG emissions through carbon taxation on fuel purchases impacts operating costs. Baytex has considered the impact of carbon taxes and has identified opportunities to de-bottleneck current gas infrastructure and increase conservation capacity. Increased gas conservation will help to lower exposure to carbon taxes charged on associated gas previously flared or combusted while lowering emissions. Baytex has applied for carbon tax exemptions where applicable and continues to monitor the development of Output Based Performance Standards which could mitigate exposure to a portion of carbon tax costs in the future. Current Canadian legislation is in place pricing carbon; the federal backstop pricing came into effect in Saskatchewan on April 1, 2019. It is estimated in 2019 carbon taxes will have a $3 million

		impact on operating costs. There is political uncertainty around the medium term impact of carbon taxes as the Provinces of Alberta and Saskatchewan challenge the constitutionality of federal carbon taxes. We will continue to monitor these developments and assess their impacts on our business.
Supply chain and/or value chain	Not evaluated	We do not foresee physical changes at this time that would lead to any opportunities to generate a substantive change in our operations, revenue or expenditures.
Adaptation and mitigation activities	Not yet impacted	Transition risks associated with regulatory uncertainty require adaptation and mitigation activities. Our company philosophy is to always meet or exceed regulatory compliance requirements. Mitigation activities include the review of emerging GHG regulations and participation in government and industry working groups. This ensures the opportunity to provide input into the regulations as they are being developed, and allows for an improved understanding of the potential future impact of regulatory changes. Adaptation activities will be required as new regulations come into force in order to confidently achieve compliance. It is currently believed that there will be a larger short to medium term impact when new regulations come into place.
Investment in R&D	Not yet impacted	Baytex has identified unsuccessful investment in new emission reduction technologies as a transition risk that could impact its business activities. The use of smaller scale trials of new technologies, or new applications for existing technologies will help to mitigate this risk. The opportunity to lower the emissions intensity of the Viking production operations will involve investment in new technologies and trial programs. There will be a medium term impact as gas conservation projects and any associated new technologies are deployed. The estimated cost is $2 million and this will help reduce cost exposure on a longer term horizon.
Operations	Not yet impacted	There is an operational impact associated with the transition risks of GHG pricing and regulatory uncertainty. Additional operating requirements and costs will be associated with carbon pricing of fuel consumption activities. Both are expected to be disruptive in the short-term as there is more certainty around which federal or provincial regulations and performance standards will come into play. At Baytex, we operate throughout Alberta, Saskatchewan and south Texas (Eagle Ford) in all temperature variations and environments. At this time we do not foresee physical changes that would lead to a substantive changes in our operations, revenue or expenditures.
Other, please specify		

C2.6

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

	Relevance	Description
Revenues	Not evaluated	A long-term supply or demand disruption could have a meaningful positive or negative impact on our sales revenues. Due to the uncertain nature of these risks, a financial analysis has not been completed.
Operating costs	Impacted	GHG pricing has impacted Baytex's operating expenses, although only minimally in 2018. Financial analysis is done on the potential increase to operating costs as carbon pricing schemes are being developed and come into effect in the jurisdiction Baytex operates in.
Capital expenditures / capital allocation	Impacted	Opportunities to reduce supply energy, reduce emissions and ensure regulatory compliance are factored into the capital budget. Gas conservation projects such as the Harmon Valley Gas Plant were budgeted for and project costs were tracked. In the short term, budgeting for the Viking gas conservation project has been anticipated and included in the 2019 budget and 2020 planning activities. Management evaluates the economics of gas conservation projects and considers the costs and benefits of emission reduction initiatives.
Acquisitions and divestments	Impacted	During the Baytex and Raging River merger, the emission intensity of the Viking assets was a consideration. Analysis was conducted by the management team around the financial impacts of reducing emission intensity and evaluating gas conservation opportunities into the future.
Access to capital	Not evaluated	
Assets	Not evaluated	At Baytex, we operate throughout western Canada and south Texas (Eagle Ford) in all temperature variations and environments. We do not foresee any physical changes at this time that would lead to any opportunities to generate a substantive change in our operations, revenue or expenditures.
Liabilities	Not evaluated	
Other		

C3. Business Strategy

C3.1

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

Yes

C3.1a

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

No, and we do not anticipate doing so in the next two years

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

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

C3.1c

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

1. Baytex is aware that climate change issues are important to our investors and residents in the communities where we operate and therefore, managing emissions and the potential impact on climate change is becoming integrated into Baytex's business strategy. We report our emissions to the CDP and the National Pollutant Release Inventory (NPRI). We are developing a more thorough emissions tracking database and improving the information we collect.
2. We have set formal GHG emissions intensity reduction targets for 2019 - 2021 from a 2018 baseline.
3. Climate change has affected our short-term strategies in our budgeting and development planning with use of multi-well pads for increased gas conservation.
4. Climate change has affected our long-term strategies. We are aware of the need for long-term strategy planning and the incorporation of new technologies and production practices to minimize our potential effect on climate change.
5. Increasingly Baytex is utilizing opportunities to consolidate oil and gas production sites. The use of large multi-well production pads allows for a greater variety GHG reduction opportunities to be considered (increased volumes of available gas and decreased capital costs).
6. In our Peace River operating region, Baytex made a business decision to reduce greenhouse gas emissions through the construction of a new gas conservation project. Previously much of this regional gas was flared as a waste byproduct of heavy oil production. By processing this gas Baytex has allowed its combustion to be put to

beneficial use. In 2018 the volume of gas captured and utilized (processed) was 25,711 e3m3 (approximately 62,761 tonnes CO2e). The capital investment in the Harmon Valley Gas Plant was approximately $22 million.

C3.1g

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

We have not implemented a climate-related scenario analysis into our business strategy due mainly to increasing uncertainty in the political arena and the impact this is having on GHG policy and regulation development.

Baytex will continue to carefully watch the situation; as provincial and federal GHG policies and the associated regulations are solidified Baytex will likely begin using climate-related scenario analysis to inform its business strategy.

C4. Targets and performance

C4.1

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

No target

C4.1c

(C4.1c) Explain why you do not have emissions target and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	We are planning to introduce a target in the next two years	Formal emission reduction targets have been put in place in 2019. Baytex's Corporate Emissions Reduction Program has a three year corporate 30% GHG emission intensity reduction target by 2021. This equates to approximately a 10% year over year reduction. The baseline year will be 2018, incorporating full year emissions for both companies.	Baytex's emissions profile changed significantly following the merger with Raging River in August of 2018; given the magnitude of changes following the merger setting an emissions target in 2018 would not have been inappropriate. However, using 2018 as a baseline, the Viking gas conservation project was started and within three years the emission intensity will be reduced by approximately 50%.

C4.2

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

C-OG4.2a

(C-OG4.2a) If you do not have a methane-specific emissions reduction target for your oil and gas activities or do not incorporate methane into your target(s) reported in C4.2 please explain why not and forecast how your methane emissions will change over the next five years.

Baytex's emissions profile changed significantly following its merger with Raging River in August of 2018. Given the challenges and changes involved with such a large merger it was not appropriate to formalize a corporate emissions reduction plan in that year. In 2019 Baytex put formal emissions reduction targets in place. The company's Corporate Emissions Reduction Program will see an approximate 10% reduction in emissions intensity each year from 2019 to 2021 using 2018 (full years emissions for both companies) as a baseline.

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	1	146,000
Not to be implemented	0	0

C4.3b

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

Initiative type

Process emissions reductions

Description of initiative

Other, please specify

Construction of a gas processing plant.

Estimated annual CO2e savings (metric tonnes CO2e)

146,000

Scope

Scope 1

Voluntary/Mandatory

Mandatory

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

0

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

22,000,000

Payback period

21-25 years

Estimated lifetime of the initiative

21-30 years

Comment

In July 2018 constructing and engineering was completed on a new gas plant in the Peace River Region. This facility was specifically designed to process associated gas (gas that is co-produced with oil) that would otherwise have been flared. The delivery of excess natural gas production to the Harmon Valley Gas Plant will eliminate the emissions of more than 146,000 tonnes CO2e from flaring per year. While sales gas produced from this facility will ultimately be burned, it will have been put to beneficial use (i.e. heating homes) as opposed to being flared as a waste product. The facility is designed for a minimum 20 operational year life-span, during that time, for Baytex, this project could eliminate 3.86 million tonnes CO2e from flaring.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Economic rate of return and compliance with regulatory requirements in Alberta and Saskatchewan.

Employee engagement	Our engineering and operations teams are engaged in seeking out opportunities to economically reduce greenhouse gas emissions.

C4.5

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

No

C-OG4.6

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

In July 2018 construction and engineering was completed on a new gas plant in the Peace River Region. This facility was specifically designed to process associated gas (gas that is co-produced with oil) that would otherwise have been flared. The delivery of excess natural gas production to the Harmon Valley Gas Plant will eliminate the emissions of more than 146,000 tonnes CO2e from flaring per year. While sales gas produced from this facility will ultimately be burned, it will have been put to beneficial use (i.e. heating homes) as opposed to being flared as a waste product. The facility is designed for a minimum 20 operational year life-span, during that time, for Baytex, this project could eliminate 3.86 million tonnes CO2e from flaring.

Since the April of 2017 Baytex has operated a fugitive emissions management program (FEMP) in its Peace River operational area which regularly surveys all producing sites for fugitive leaks and repairs discovered leaks within a specified timeline.

In August of 2018 Baytex registered the Peace River Instrument Gas to Instrument Air Conversion Project under the Alberta Emission Offset System (Project Identifier 4070-4748). This pilot project involved the conversion of gas driven well site pneumatic systems to compressed air driven systems in the companies Reno production field.

COG4.7

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

Yes

C-OG4.7a

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

Baytex's fugitive emissions management program (FEMP) in Peace River involves a number of steps including: monthly surveys of all producing sites using a forward looking infrared thermal imaging (FLIR) camera; daily operator checks of production equipment; active tracking of all identified leaks; repairs of all leaks on a specified timeline and annual reporting of the programs performance.

C-OG4.8

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

In Peace River, Baytex has implemented gas conservation efforts to significantly reduce flaring. The ultimate goal of these programs is to reduce routine flaring in the region to less than 5% of all associated gas produced.

C5. Emissions methodology

C5.1

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

Scope 1

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

2,229,756

Comment

Baytex and Raging River merged on August 22, 2018, and this resulted in an increase in overall absolute emissions for 2018 as compared to 2017. The combined entity for the remainder of 2018 had direct emissions of 1,278,240 tCO2e. The baseline year of 2018, which includes full year emissions from both entities is 2,229,756 tCO2e.

Scope 2 (location-based)

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

92,387

Comment

Baytex and Raging River merged on August 22, 2018, and this resulted in an increase in overall absolute emissions for 2018 as compared to 2017. The combined entity for the remainder of 2018 had in-direct emissions of 64,391 tCO2e. The baseline year of 2018, had in-direct full year emissions from both entities of 92,387 tCO2e.

Scope 2 (market-based)

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

0

Comment

Baytex does not report Market based, all Scope 2 is location based.

C5.2

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

Act on the Rational Use of Energy
Canadian Association of Petroleum Producers, Calculating Greenhouse Gas Emissions, 2003
IPCC Guidelines for National Greenhouse Gas Inventories, 2006

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

1,278,240.46

Start date

January 1, 2018

End date

December 31, 2018

Comment

Baytex and Raging River merged on August 22, 2018, and this resulted in an increase in overall absolute emissions for 2018 as compared to 2017. The combined entity for

the remainder of 2018 had direct emissions of 1,278,240 tCO2e. The baseline year of 2018, had direct full year emissions from both entities of 2,229,756 tCO2e.

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

C6.3

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

Reporting year

Scope 2, location-based

64,390.68

Start date

January 1, 2018

End date

December 31, 2018

Comment

Scope 2 emission calculated for Baytex are sourced from electricity consumption in all provinces of operation. Baytex and Raging River merged on August 22, 2018, and this resulted in an increase in overall absolute emissions for 2018 as compared to 2017. The combined entity for 2018 had in-direct emissions of 64,391 tCO2e. The baseline year of 2018, had full year in-direct emissions from both entities of 92,387 tCO2e.

C6.4

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

Yes

C6.4a

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

Source

Venting losses from pneumatic devices (intentional), blowdown losses, some production tanks, and compressor starts.

Relevance of Scope 1 emissions from this source

Emissions are not evaluated

Relevance of location-based Scope 2 emissions from this source

No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions from this source

Explain why this source is excluded

It is technically difficult to accurately measure and cost prohibited to measure and monitor these venting sources, and in some instances (ie. tanks) unsafe.

C6.5

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

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Explanation

Baytex GHG strategy is to continuously improve GHG emissions from our operated facilities. Our focus is on emissions that are under our direct operational control.

Capital goods

Evaluation status

Relevant, not yet calculated

Explanation

Baytex GHG strategy is to continuously improve GHG emissions from our operated facilities. Our focus is on emissions that are under our direct operational control.

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

Evaluation status

Relevant, not yet calculated

Explanation

Baytex GHG strategy is to continuously improve GHG emissions from our operated facilities. Our focus is on emissions that are under our direct operational control.

Upstream transportation and distribution

Evaluation status

Not evaluated

Explanation

Baytex GHG strategy is to continuously improve GHG emissions from our operated facilities. Our focus is on emissions that are under our direct operational control.

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Explanation

Baytex GHG strategy is to continuously improve GHG emissions from our operated facilities. Our focus is on emissions that are under our direct operational control.

Business travel

Evaluation status

Not evaluated

Explanation

Baytex GHG strategy is to continuously improve GHG emissions from our operated facilities. Our focus is on emissions that are under our direct operational control.

Employee commuting

Evaluation status

Relevant, not yet calculated

Explanation

Upstream leased assets

Evaluation status

Not evaluated

Explanation

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Explanation

Calculating third party distribution of our products is not reasonable as it would entail double counting emissions being reported by the mid-stream or transportation companies in our industry. Once our product reaches a distribution point it is combined with the products of other companies and therefore determining the emissions associated specifically with the Baytex products is not reasonable.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Explanation

Calculating third party distribution of our products is not reasonable as it would entail double counting emissions being reported by the mid-stream or transportation companies in our industry. Once our product reaches a distribution point it is combined with the products of other companies and therefore determining the emissions associated specifically with the Baytex products is not reasonable.

Use of sold products

Evaluation status

Not evaluated

Explanation

End of life treatment of sold products

Evaluation status

Not evaluated

Explanation

Downstream leased assets

Evaluation status

Not evaluated

Explanation

Franchises

Evaluation status

Not evaluated

Explanation

Investments

Evaluation status

Not evaluated

Explanation

Other (upstream)

Evaluation status

Not evaluated

Explanation

Other (downstream)

Evaluation status

Not evaluated

Explanation

C6.7

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

No

C6.10

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

Intensity figure

0.085

Metric numerator (Gross global combined Scope 1 and 2 emissions)

1,342,630

Metric denominator

barrel of oil equivalent (BOE)

Metric denominator: Unit total

15,834,430

Scope 2 figure used

Location-based

% change from previous year

28

Direction of change

Increased

Reason for change

Baytex and Raging River merged on August 22, 2018 and resulted in an increase in the intensity of emissions with the addition of the Viking assets. In 2018 the combined entity had an intensity of 0.085 tCO2e per BOE and both companies full year had a combined intensity of 0.108 tCO2e (55% increase from 2017 revised 0.070 tCO2e).

Intensity figure

0.00244

Metric numerator (Gross global combined Scope 1 and 2 emissions)

1,342,630

Metric denominator

unit total revenue

Metric denominator: Unit total

550,383,000

Scope 2 figure used

Location-based

% change from previous year

4

Direction of change

Decreased

Reason for change

Although absolute emissions increased for the combine entity in 2018, there was a 31% increase in sales revenue of the combined entity which resulted in an overall decrease of 4% from 2017.

Intensity figure

2,712.38

Metric numerator (Gross global combined Scope 1 and 2 emissions)

1,342,630

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

495

Scope 2 figure used

Location-based

% change from previous year

8

Direction of change

Decreased

Reason for change

Absolute emissions increased in 2018 for the combined entity by 57% compared to Baytex in 2017. There were 135 new FTE employees in 2018 compared to 2017 which resulted in an overall decrease of 8% from both companies full year 2017.

C-OG6.12

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

Unit of hydrocarbon category (denominator)

Thousand barrels of crude oil / condensate

Metric tons CO2e from hydrocarbon category per unit specified

1,342,630

% change from previous year

19

Direction of change

Increased

Reason for change

Absolute emissions increased in 2018 for the combined entity by 57% compared to Baytex in 2017. Light and heavy oil production for the combined entity increased 8,300 boe/d or 32% compared to 2017 which resulted in an overall increase of 19% from 2017.

Comment

C-OG6.13

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

Oil and gas business division

Upstream

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

5.14

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

1.45

Comment

For the full year 2018 including both Baytex and Raging River:
Estimated total methane emitted expressed as a % of natural gas production: 10.19%
Estimated total methane emitted expressed as a % of total hydrocarbon production: 2.52%

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	603,122	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	659,039	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	16,079	IPCC Fourth Assessment Report (AR4 - 100 year)

C-OG7.1b

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

Emissions category

Combustion (excluding flaring)
Flaring
Venting
Fugitives

Value chain

Upstream

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

603,112.36

Gross Scope 1 methane emissions (metric tons CH4)

26,361.56

Total gross Scope 1 emissions (metric tons CO2e)

1,278,240.39

Comment

Baytex and Raging River merged on August 22, 2018, and this resulted in an increase in overall absolute emissions for 2018 as compared to 2017. The combined entity for the remainder of 2018 had direct emissions of 1,278,240 tCO2e. The baseline year of 2018, had direct full year emissions from both entities of 2,229,756 tCO2e and methane emissions 62,529 tonnes CH4.

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Canada	1,278,240.39

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Conventional District	74,117.96
Duvernay District	12,543.77
Lloydminster District	323,133.66
Peace River District	361,649.01
Viking District	506,796

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

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

	Gross Scope 1 emissions, metric tons CO2e	Comment
Oil and gas production activities (upstream)	1,278,240.39	
Oil and gas production activities (downstream)	0	No downstream production activities

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Canada	64,390.68	0	0	0

C7.6

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

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Alberta	42,672.9	0
Saskatchewan	21,717.78	0

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

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

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Oil and gas production activities (upstream)	64,390	0	
Oil and gas production activities (downstream)	0	0	No downstream production activities

C7.9

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

Increased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption				
Other emissions reduction activities				

Divestment				
Acquisitions				
Mergers	487,434	Increased	36	Merger with Raging River Exploration (RRX) completed in August 2018, and this resulted in an increase of overall production for 2018 as compared to 2017. For the full 2018 year RRX legacy asset emissions were 1,466,964 tCO2e or 63% of the total emissions.
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

C7.9b

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

Location-based

C8. Energy

C8.1

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

More than 10% but less than or equal to 15%

C8.2

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

	Indicate whether your organization undertakes this

	energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	3,200,963.41	3,200,963.41
Consumption of purchased or acquired electricity		0	83,929.55	83,929.55
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		0	3,284,892.96	3,284,892.96

C8.2b

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

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

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

C8.2c

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

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

74,670.22

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Fuels (excluding feedstocks)

Propane Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

181,139.17

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

2,261,959.17

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

182,115.99

Comment

C8.2d

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

Diesel

Emission factor

2.744

Unit

kg CO2 per liter

Emission factor source

CAPP 2003, Default: Diesel

Comment

Natural Gas

Emission factor

2,000

Unit

kg CO2e per m3

Emission factor source

Alberta CCIR Quantification Methodology, V1.1 November 2018 for CO2 Emission Factor. CAPP 2003 for CH4 and N2O Emission Factors. CAPP 2007 for Thermal Efficiency.

Comment

Propane Gas

Emission factor

1.507

Unit

kg CO2 per liter

Emission factor source

WCI 2011, Default: Propane

Comment

C8.2e

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	0	0	0	0
Heat	0	0	0	0
Steam	182,115.99	182,115.99	0	0
Cooling	0	0	0	0

C8.2f

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

C9. Additional metrics

C9.1

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

C-OG9.2a

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

	In-year net production	Comment
Crude oil and condensate, million barrels	10.7	Includes light, medium and heavy crude oil net of royalty. US volumes are not included as they are not within operational control. Raging River net volumes included post-merger from August 22 to December 31, 2018.
Natural gas liquids, million barrels	0.4	Net of royalty. US volumes are not included as they are not within operational control. Raging River net volumes included post-merger from August 22 to December 31, 2018.
Oil sands, million barrels (includes bitumen and synthetic crude)	0.2	
Natural gas, billion cubic feet	15.1	Net of royalty. US volumes are not included as they are not within operational control. Raging River net volumes included post-merger from August 22 to December 31, 2018.

C-OG9.2b

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

The Baytex reserves report have been prepared in accordance with the standards contained in the Canadian Oil and Gas Evaluations Handbook (COGEH) and reserves definitions contained in NI 51-101.

C-OG9.2c

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

	Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)	Comment
Row 1	260.74	260.74	260.74	Our disclosure includes our net proved plus probable reserves. We do not provide

				disclosure of possible or contingent resources. US reserves are not included as they are not within operational control.

C-OG9.2d

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

	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Crude oil / condensate / Natural gas liquids	67	67	67	Our disclosure includes our net proved plus probable reserves. We do not provide disclosure of possible or contingent resources. US reserves are not included as they are not within operational control.
Natural gas	12	12	12	Our disclosure includes our net proved plus probable reserves. We do not provide disclosure of possible or contingent resources. US reserves are not included as they are not within operational control.
Oil sands (includes bitumen and synthetic crude)	21	21	21	Our disclosure includes our net proved plus probable reserves. We do not provide disclosure of possible or contingent resources. US reserves are not included as they are not within operational control.

C-OG9.2e

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

Development type

Other, please specify

Conventional (L/M Oil, Condensate, NGL, Natural Gas)

In-year net production (%)

42

Net proved reserves (1P) (%)

61

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

47

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

47

Net total resource base (%)

47

Comment

Our disclosure includes our net proved plus probable reserves. We do not provide disclosure of possible or contingent resources.
US reserves are not included as they are not within operational control.

Development type

Oil sand/extra heavy oil

In-year net production (%)

2

Net proved reserves (1P) (%)

8

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

21

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

21

Net total resource base (%)

21

Comment

Our disclosure includes our net proved plus probable reserves. We do not provide disclosure of possible or contingent resources.
US reserves are not included as they are not within operational control.

Development type

Other, please specify

Heavy Oil

In-year net production (%)

55

Net proved reserves (1P) (%)

30

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

30

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

30

Net total resource base (%)

30

Comment

Our disclosure includes our net proved plus probable reserves. We do not provide disclosure of possible or contingent resources.
US reserves are not included as they are not within operational control.

Development type

Tight/shale

In-year net production (%)

1

Net proved reserves (1P) (%)

2

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

2

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

2

Net total resource base (%)

2

Comment

Our disclosure includes our net proved plus probable reserves. We do not provide disclosure of possible or contingent resources.
US reserves are not included as they are not within operational control.

C-CO9.6/C-EU9.6/C-OG9.6

(C-CO9.6/C-EU9.6/C-OG9.6) Disclose your investments in low-carbon research and development (R&D), equipment, products, and services.

C-OG9.7

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

50

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.2

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

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

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

Yes

C11.1a

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

Alberta carbon tax

C11.1c

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

Alberta carbon tax

Period start date

January 1, 2018

Period end date

December 31, 2018

% of emissions covered by tax

Total cost of tax paid

48,839.87

Comment

In 2018 for Alberta, the Oil and Gas Production Exemption covered the majority of Baytex's operations. Taxes paid directly to suppliers on un-marked fuel were not tracked separately and are not part of the total cost disclosed.

C11.1d

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

The Alberta Carbon Levy charges end use consumers of fossil fuels through a payment, collection and remittance system. The carbon levy came into effect in the Province of Alberta on January 1, 2017. For 2018 Baytex had Oil and Gas Production Exemptions under the Alberta Carbon Levy, which were in place until 2023. The majority of purchases and consumption activities fell under this exemption, with the exception of un-marked fuel. All provincial requirements for registration, monthly reporting of consumption activities and remittances have been met since the inception of the Alberta Carbon Levy.

In the jurisdictions Baytex operates, management monitors and reviews developments to provincial and federal carbon tax policies and the implementation of carbon pricing schemes. On May 30, 2019 the Alberta government repealed the carbon tax and all issued exemptions. The Canadian federal carbon pricing backstop became effective in Saskatchewan effective April 1, 2019 and is currently legislated to come into effect in Alberta on January 1, 2020.

Currently Baytex tracks operated gas consumption volumes in Alberta and Saskatchewan on a monthly basis, for the purpose of understanding consumption and the potential financial impact of levy amounts. Baytex has registering for Alberta exemptions, applied for the Saskatchewan Output Based Performance Standards program and plans on utilizing carbon offset programs where applicable in these jurisdictions. Future changes to the provincial systems and their

equivalency under the federal Greenhouse Gas Pollution Pricing Act will be closely monitored by the company.

C11.2

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

Yes

C11.2a

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

Credit origination or credit purchase

Credit origination

Project type

Methane avoidance

Project identification

The Peace River Instrument Gas to Instrument Air Conversion Project was registered on the Alberta Emissions Offset Registry on August 29, 2018 (Project Identifier 4070-4748). The Project is eligible to generate credits as of this registration date.

Verified to which standard

Not yet verified

Number of credits (metric tonnes CO2e)

750

Number of credits (metric tonnes CO2e): Risk adjusted volume

750

Credits cancelled

No

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

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

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

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

No, we do not engage

C12.1d

(C12.1d) Why do you not engage with any elements of your value chain on climate-related issues, and what are your plans to do so in the future?

Currently, Baytex is focused on internal efforts required to accurately quantify emissions from source and activities directly related to Baytex operations. By reporting accurate data to provincial and federal regulators, Baytex is ensuring that climate-related studies performed at various levels of government and industry have best available data related to Baytex's operations.

C12.3

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

Direct engagement with policy makers

Trade associations

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Cap and trade	Support with minor exceptions	Direct communications with the Alberta Climate Change Office.	Implementation and interpretation of the Quantification Protocol for Greenhouse Gas Emission Reductions.
Regulation of methane emissions	Support with minor exceptions	Direct feedback on the development of new Methane reduction regulations with the Alberta Energy Regulator Climate Policy Assurance Branch.	AER Draft Directive 060 - Upstream Petroleum Industry Flaring, Incinerating and Venting. Specifically sections added to regulate the provinces Methane Reduction Program.
Regulation of methane emissions	Support with minor exceptions	Direct and sustained communications and feedback with the Alberta Energy Regulator.	Implementation and interpretation of Directive 084 - Requirements for Hydrocarbon Emissions Controls and Gas Conservation in the Peace River Area.

Regulation of methane emissions	Support with minor exceptions	Direct feedback on the development of new Methane reduction regulations with the Saskatchewan Ministry of Energy and Resources Climate Change Branch.	Development and implementation of the Saskatchewan Oil & Gas Emissions Management Regulations (OGEMR).
Regulation of methane emissions	Support with minor exceptions	Direct engagement with the Alberta Government Department of Energy and the Assistant Deputy Minister of Resource Development Policy .	The Alberta Climate Leadership Act and AER Draft Directive 060 - Upstream Petroleum Industry Flaring, Incinerating and Venting. Specifically sections added to regulate the provinces Methane Reduction Program.

C12.3b

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

No

C12.3f

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

Before engaging with government or regulators on the topics of climate change policy or regulations Baytex staff and executives will always meet to align on the purpose and objectives of the engagement.

C12.4

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

C14. Signoff

C-FI

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

C14.1

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

	Job title	Corresponding job category
Row 1	Jason Jaskela	Chief Operating Officer (COO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

Please confirm below

I have read and accept the applicable Terms