

# Welcome to your CDP Climate Change Questionnaire 2019

## C0. Introduction

### C0.1

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

AltaGas, a Canadian corporation, is a leading North American clean energy infrastructure company with strong growth opportunities and a focus on owning and operating assets to provide clean and affordable energy to its customers. We leverage the strength of our assets and expertise along the energy value chain to connect customers with premier energy solutions from the well sites of upstream producers to the doorsteps of homes and businesses, to new markets around the world.

AltaGas has three business segments:

- Midstream, which serves customers primarily in the Western Canada Sedimentary Basin and transacts more than 1.5 Bcf/d of natural gas. Our Midstream business includes natural gas gathering and processing, natural gas liquids (NGL) extraction and fractionation, transmission, storage, natural gas and NGL marketing. With our Ridley Island Propane Export Terminal and through our ownership interest in Petrogas and the Ferndale Terminal, we are uniquely positioned to provide producers with an opportunity to move natural gas and natural gas liquids to new premium markets overseas. Our Midstream segment includes investments in certain pipelines in the northeastern United States;
- Utilities, which serves approximately 1.6 million customers with a rate base of approximately \$3.7 billion through ownership of regulated natural gas distribution utilities in the District of Columbia, Virginia, Maryland, Michigan and Alaska. The Utilities business also includes storage facilities and contracts to interstate natural gas transportation and storage services. Our Utilities are underpinned by regulated returns and regulatory regimes that generally provide stable earnings and cash flows; and
- Power, which is engaged in the generation and sale of capacity, electricity, and ancillary services and related products through power facilities in Alberta, California, and Colorado, as well as distributed generation assets including solar photovoltaic and fuel cells across the United States. Our Power segment includes 1,105 MW of operational gross power generation capacity from gas-fired, distributed energy, solar, biomass, and energy storage.

With infrastructure assets in some of the fastest growing energy markets in North America, including prominent positions in the Montney and Marcellus/Utica basins, and utility operations in five states, we are developing an integrated footprint capable of delivering sustained value to shareholders and customers alike. AltaGas has a talented workforce of nearly 3,000 people across North America.

### 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

United States of America

## C0.4

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

CAD

## C0.5

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

Operational control

## C-EU0.7

**(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.**

Row 1

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**Electric utilities value chain**

Electricity generation

**Other divisions**

## 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

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**Oil and gas value chain**

Midstream

## 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
Board-level committee	AltaGas has four standing committees of the Board of Directors: (1) Audit, (2) Governance, (3) Human Resources and Compensation (HRC) and (4) EH&S. The Board of Directors Environment, Health and Safety Committee ("EHS Committee") is responsible for climate-related issues. The committee makes recommendations to the Board of Directors on AltaGas' policies and procedures with respect to EH&S.

### C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance	The Board of Directors oversees the development, adoption and implementation of the Corporation's strategies and plans. In addition to its general powers and responsibilities, the Board's responsibilities include: <ul style="list-style-type: none"> <li>• Establishing a code of business ethics, encouraging a culture of ethical business conduct throughout the organization and monitoring compliance with the code of business ethics by the directors, officers and employees of the Corporation and its subsidiaries;</li> <li>• Participating in the Corporation's strategic</li> </ul>

	<p>objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Overseeing major capital expenditures, acquisitions and divestitures</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>planning process on an annual basis, including an examination of the opportunities and risks of the business of the Corporation and its subsidiaries;</p> <ul style="list-style-type: none"> <li>• Identifying and understanding the principal risks associated with the Corporation’s business and reviewing and approving the implementation of systems to manage such risks;</li> <li>• Overseeing management development and succession planning through the Human Resources and Compensation Committee of the Board of Directors;</li> <li>• Establishing policies for communicating with Shareholders and others and for receiving comment from Shareholders and others;</li> <li>• Reviewing the effectiveness of the Corporation’s internal control and management information systems;</li> <li>• Developing the Corporation’s approach to governance through the Governance Committee of the Board of Directors;</li> <li>• As requested by the Board of Directors, overseeing finance, accounting, audit, financial risk and financial control matters through the Audit Committee of the Board of Directors;</li> <li>• Overseeing environment, occupational health and safety matters through the Environment, Occupational Health and Safety Committee of the Board of the Directors;</li> <li>• The general review of the Corporation’s results of operations, including the evaluation of the general and specific performance of the Chief Executive Officer and management;</li> <li>• The review of AltaGas’ consolidated financial and operational status and performance; and</li> <li>• Comprehensive review and approval of AltaGas’ budget and plan for AltaGas and its affiliates.</li> </ul>
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## 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	Both assessing and managing	Quarterly

(CEO)	climate-related risks and opportunities	
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## 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).**

The Chief Executive Officer (CEO) is the highest-level management position below the board level. The EHS committee is responsible for reporting climate related issues to the board, but because the CEO is ultimately responsible to deliver on AltaGas' strategy, overall management of climate related risk and opportunities becomes the responsibility of the CEO.

## 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).**

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### Who is entitled to benefit from these incentives?

All employees

### Types of incentives

Monetary reward

### Activity incentivized

Emissions reduction project

### Comment

Incentive targets are a combination of business profit and individual performance measures. Individual performance targets are determined by employee role.

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### Who is entitled to benefit from these incentives?

All employees

### Types of incentives

Monetary reward

### Activity incentivized

Emissions reduction target

**Comment**

Incentive targets are a combination of business profit and individual performance measures. Individual performance targets are determined by employee role.

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**Who is entitled to benefit from these incentives?**

Environment/Sustainability manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Energy reduction project

**Comment**

A few of the key performance drivers for the Senior Vice President of Environment, Health, and Safety, include measurement, reporting and compliance (including meeting emission reduction targets) with regional and federal climate change programs, such as: (i) Alberta's Large final emitter regulation, (ii) Provincial GHG reporting requirements, (iii) British Columbia's Greenhouse Gas Reduction Act, Reporting Regulation, (iii) Canada's Greenhouse Gas Emissions Reporting Program, and (iv) California's Global Warming Solutions Act and the United States Environmental Protection Agency's Greenhouse Gas Reporting Program. Other drivers included ensuring AltaGas has a strong integrated Environmental Management System in place, along with supporting procedures, policies, and programs to best protect our employees, the environment, and the communities where we work.

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**Who is entitled to benefit from these incentives?**

Environment/Sustainability manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Other, please specify  
Compliance

**Comment**

A few of the key performance drivers for the Senior Vice President of Environment, Health, and Safety, include measurement, reporting and compliance (including meeting emission reduction targets) with regional and federal climate change programs, such as: (i) Alberta's Large final emitter regulation, (ii) Provincial GHG reporting requirements, (iii) British Columbia's Greenhouse Gas Reduction Act, Reporting Regulation, (iii) Canada's Greenhouse Gas Emissions Reporting Program, and (iv) California's Global Warming Solutions Act and the United States Environmental Protection Agency's Greenhouse Gas Reporting Program. Other drivers included ensuring AltaGas has a

strong integrated Environmental Management System in place, along with supporting procedures, policies, and programs to best

### Who is entitled to benefit from these incentives?

Chief Executive Officer (CEO)

### Types of incentives

Monetary reward

### Activity incentivized

Emissions reduction project

### Comment

Compensation programs and pay outs for the Chief Executive Officer are strongly aligned with the achievement of AltaGas' strategy. Performance of executives forms a foundation on which all decisions to award compensation are based. The compensation program is designed to motivate management to operate the business in a safe, environmentally responsible and cost effective manner, focusing on the longer term, and on providing the superior returns and social value that Shareholders expect.

## 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	0	3	
Medium-term	3	6	
Long-term	6	10	

### 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
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Row 1	Six-monthly or more frequently	>6 years	
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## C2.2b

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

Company Level: Our risk management is governed by the Board of Directors, who are responsible for identifying, and understanding the principal risks, including climate change risk, associated with AltaGas' business and reviewing and approving the implementation of systems to manage those risks. The board of directors receives reports on risk matters from both the committees of the board of directors and from management. The duties and responsibilities of the Board of Directors Audit Committee is the oversight of risk management, including a review of the Corporation's material risks, a review of the method of risk analysis by the Corporation, and review of the strategies, policies and practices in place for risk management. AltaGas actively manages its exposure to risk by focusing on mitigating measures that are required to reduce or eliminate risk to acceptable and manageable levels.

Asset Level: Risks/opportunities are mitigated through the integration into long-term and short-term plans as well as the budget for each facility, which includes a price for carbon and regulatory assumptions. This process ensures such costs are included in the planning and or operation of each asset. AltaGas conducts operational assessments at our facilities to highlight emission reduction opportunities and to increase site efficiency. Following annual greenhouse gas reporting, potential improvement opportunities are reviewed and implemented where appropriate. Where climate related risk/opportunities cannot be fully mitigated (such as natural disasters) , AltaGas looks to accept these risks and adapt business processes or maintain comprehensive insurance programs to reduce the potential impact of these types of events on the organization.

AltaGas defines a substantive or material risk as having a financial impact at or in excess of 3% of forecast EBITDA. Using 3% of EBITDA as material for risk reporting is informed in part by what is deemed material for SOX reporting.

## 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	AltaGas' businesses are subject to extensive and complex laws and regulations in the jurisdictions in which they carry on business. Regulations and laws are subject to ongoing policy initiatives. Some of AltaGas' significant facilities are subject to current climate change regulations. The direct or indirect costs of compliance with these regulations may have a material adverse effect on AltaGas' business, financial condition, results of operations and prospects. AltaGas' business could also be indirectly impacted by laws and regulations that



		<p>affect its customers or suppliers; to the extent such changes result in reductions in the use of natural gas by its customers or limit the operations of, or increase the costs faced by producers. To mitigate the risk around current climate change regulation, AltaGas forecasts expected future carbon pricing and incorporate that into its strategic plans. AltaGas also focuses on emissions reductions, energy efficiency and technology deployment to aid with risk mitigation. An example of Current Regulation Considerations impacting AltaGas' Business:</p> <p>Midstream – Carbon Competitiveness Incentive Regulation (CCIR) - The CCIR took effect on January 1, 2018. The regulation applies to large emitter facilities with direct emissions totalling 100,000 tonnes or more of carbon dioxide equivalent per annum. AltaGas' Harmattan and Gordondale Facility are considered large emitters under the CCIR program.</p>
<p>Emerging regulation</p>	<p>Relevant, always included</p>	<p>Changes in the regulatory environment may be beyond AltaGas' control and may significantly affect AltaGas' businesses, results of operations and financial conditions. Some of AltaGas' significant facilities may be subject to future federal or state/provincial climate change regulations or both. The direct or indirect costs of compliance with these regulations may have a material adverse effect on AltaGas' business, financial condition, results of operations and prospects. AltaGas' business could also be indirectly impacted by laws and regulations that affect its customers or suppliers; to the extent such changes result in reductions in the use of natural gas by its customers or limit the operations of, or increase the costs faced by producers. AltaGas continuously monitors proposed changes to climate change policy and regulations in order to identify, quantify, and manage material risks. Where risks are material, we comment on proposals independently, as well as through our industry associations.</p> <p>An example of emerging regulation considerations impacting AltaGas' Business:</p> <p>Midstream - Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting, and Directive 017: Measurement Requirements for Oil and Gas Operations. Draft regulations were released for public comment in April 2018, and on December 13, 2018 the revised editions were released. The new edition of Directive 060 comes into effect on January 1, 2020, including the methane reduction requirements, which intend to reduce methane emissions from oil and gas operations by 45 per cent (relative to 2014 levels) by 2025. The requirements address the primary sources of methane emissions from the oil and gas industry: fugitive emissions and venting, which includes emissions from compressors, pneumatic devices, and glycol dehydrators. The requirements also focus on improved measurement,</p>

		monitoring and reporting of methane emissions.
Technology	Relevant, always included	<p>Technological improvements or innovations that support the transition to a lower-carbon economic system can affect AltaGas customers or suppliers; to the extent such changes result in reductions in the use of natural gas by its customers or limit the operations of, or increase the costs faced by producers. AltaGas mitigates this risk by ensuring diversification of assets across the Gas, Power and Utilities Divisions. AltaGas also undertakes extensive studies that support its investment decisions.</p> <p>AltaGas has mitigated this risk and recognized the opportunities and financial rewards in developing a green energy business. AltaGas has also made significant investment in cleaner technologies such as cogeneration, natural gas-fired power generation, Carbon Capture and Storage projects, as well as continual operational improvements across the AltaGas Enterprise to help mitigate strict emission requirements across AltaGas businesses. AltaGas' ability to capitalize on changing demand for clean energy technology was fully demonstrated when AltaGas safely commissioned one of the largest battery storage facilities in North America, the Pomona Energy Storage Facility, located at AltaGas' existing Pomona facility in Southern California.</p>
Legal	Not relevant, included	<p>In the course of its business, AltaGas is subject to lawsuits and other claims. Defence and settlement costs associated with such lawsuits and claims can be substantial, even with respect to lawsuits and claims that have no merit. Due to the inherent uncertainty of the litigation process, the resolution of any particular legal proceeding could have a material adverse effect on the financial position or operating results of AltaGas. AltaGas mitigates litigation risks through proactive management of lawsuits and other claims, continuous monitoring of defense and settlement cost of lawsuits and claims, maintain a strong in-house legal department, and use of expert third parties when needed.</p>
Market	Relevant, always included	<p>AltaGas is exposed to market risks resulting from fluctuations in commodity prices and interest rates, in both North American markets and, with respect to the LNG and LPG export business, offshore markets. In these markets commodity supply and demand is affected by a number of factors including, without limitation, the amount of the commodity available to specific market areas either from the wellhead or from storage facilities, prevailing weather patterns, the U.S., Canadian and Asian economies, the occurrence of natural disasters and pipeline restrictions. The fluctuations in commodity prices are</p>

		beyond AltaGas' control and, accordingly, could have a material adverse effect on AltaGas' business, financial condition and cash flow. AltaGas manages this risk through various strategies and organizational capabilities. Some examples would include entry into long term contracts, strategically locate facility operations, and maintain diversification across AltaGas' businesses. This list is not exhaustive for this category. Additional risk factors and mitigation strategies are listed in the AltaGas Annual Information Form for the year ended 2018, which can be found on our website.
Reputation	Relevant, always included	AltaGas places great importance on establishing and maintaining positive relationships with its stakeholders, including, without limitation, within the communities in which AltaGas operates, local Indigenous groups and regulators. There is an increasing level of public concern relating to the perceived effect of natural resources activities, including, without limitation, exploration, development, production, processing and transportation, on certain environmental and social aspects such as air and water quality, noise, dust, land and ecological disturbance, employment and economic development opportunities. Opposition to natural resources activities by communities or Aboriginal groups may ultimately impact AltaGas, including its ability to obtain or maintain permits, its operations, and its reputation. Publicity adverse to AltaGas' operations, AltaGas' partners, or others operating in the energy industry generally, could have an adverse effect on AltaGas and its operations. Reputation is central to AltaGas' relationships in the communities that we operate and directly affects our ability to do business, both today and in the future. We mitigate this risk through proactive stakeholder relations and communication and by building strong working relationships with Indigenous peoples, stakeholders, and regulators.
Acute physical	Relevant, always included	Climate related physical risks to AltaGas' people, the environment and assets is an ever present risk that is continually assessed. Typically this exposure is associated with the frequency and severity of extreme weather events. AltaGas maintains specific emergency response plans developed and implemented to assist in managing risks and impacts from acute physical climate related risk. AltaGas' leadership and technical teams include these risk types into the planning of all projects. The frequency of this risk assessment is dependent on each specific risk case. For example, AltaGas has operations that are located in areas that have historically have been exposed to the risk of forest fire. Annually, our infrastructure is exposed to acute physical risk associated with Forest fire season. During this time, our monitoring of conditions is continuous to support our ability to react and respond to a potential impact on our operations.
Chronic	Relevant,	AltaGas' businesses are subject to the risks normally associated with

physical	always included	<p>the operation and development of natural gas, NGL, LNG, LPG and power systems and facilities, including, without limitation, mechanical failure, transportation problems, physical degradation, operator error, manufacturer defects, sabotage, terrorism, failure of supply, weather, wind or water resource deviation, catastrophic events and natural disasters, fires, floods, explosions, earthquakes and other similar events. Unplanned outages or prolonged downtime for maintenance and repair typically increase operation and maintenance expenses and reduce revenues. The occurrence or continuation of any of these events could increase AltaGas' costs and reduce its ability to process, store, transport, deliver or distribute natural gas, NGLs, LNG and LPG, or generate or deliver power. AltaGas manages this risk by having a geographically diverse energy business with a focus on investing in, and operating infrastructure to provide, clean and affordable energy to our customers in North America. Having a well-diversified portfolio of assets across three businesses reduces exposure to chronic physical risks.</p>
Upstream	Relevant, always included	<p>AltaGas businesses are subject to "upstream" risk at various places across its value chain. Maintaining a diversified business across three business division (Gas, Power, and Utilities) helps to mitigate those risks.</p> <p>Upstream risk associated with AltaGas businesses could be related to sufficient water flow available to generate electricity at our run-of-river hydroelectric power projects or sufficient wind flows to generate sufficient electricity at our wind power projects or the ability to secure natural gas to support our infrastructure.</p>
Downstream	Relevant, always included	<p>AltaGas businesses are subject to "downstream" risk at various places across its value chain. Maintaining a diversified business across three business division (Gas, Power, and Utilities) helps to mitigate those risks.</p> <p>Downstream risk associated with AltaGas businesses could be related to emerging regulations and the impact that may have on consumer behavior, which could result in the reduction in the use of natural gas or limit the operations of, or increase the costs faced by producers.</p>

## C2.2d

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

The Board of Directors participates in the corporation's strategic planning process on an annual basis, including the examination of the opportunities and risks of the Corporation and its

subsidiaries. Identifying and understanding the principal risks associated with the Corporation's business and reviewing and approving the implementation of systems to manage such risks are also the responsibility of the Board of Directors. AltaGas seeks to optimize risk and reward, ensuring that returns are commensurate with the level of risk assumed. Risks and opportunities that have been identified at the company and asset level are prioritized by assessing the impact of the risk and opportunity on our overall Strategy. In practice, risks and opportunities are collected and assessed throughout the year following our Risk Management Process and are consulted as the strategic plan is updated. Material risks and opportunities surface as our short-term and long-term strategic plan is updated. High priority is given to opportunities that encourage Strategy implementation. As well, high priority is given to risks that could prevent Strategy implementation.

An example of AltaGas' management process regarding transitional risks and opportunities is the development of our Ridley Island Propane Export Terminal (RIPET). RIPET is located near Prince Rupert, British Columbia, and is the first propane export facility off the west coast of Canada. Construction of RIPET commenced during the second quarter of 2017, with the first propane cargo shipment departing the facility in the second quarter of 2019. RIPET is the closest North American LPG terminal to Asia, allowing Western Canadian propane producers the opportunity to diversify their global market access by providing an alternative low carbon, clean-burning energy source. Compared to other fuels, propane's utilization helps to improve air quality, reduce greenhouse gas (GHG) emissions and protect the environment.

An example of a physical risk that has been quantified and accepted for our operations is the risk of increased significant weather events, and their potential impact on our assets. To mitigate the risk associated with natural disasters and catastrophic events, AltaGas engineers its facilities to accommodate for physical risks that are identified based on geography. In addition to these engineering controls, AltaGas adjusts or implements operating procedures to account for potential impacts, as well as maintains comprehensive insurance programs to cover losses from natural disasters and catastrophic events such as fires, earthquakes, explosions, floods, tornados, terrorist acts, and other similar occurrences.

## 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.**

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**Identifier**

Risk 1

**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**

Following the ratification of the Paris agreement, domestic governments are gearing up to implement regulatory changes that will allow for those countries to meet their committed reduction targets.

The Government of Canada formally announced the Pan-Canadian Framework on Clean Growth and Climate Change. As a result, the federal government plans to introduce new legislation and regulations to implement a carbon pollution pricing system, to be applied in provinces and territories that do not have a carbon pricing system that aligns with the federal benchmark. The federal carbon pollution pricing scheme will be composed of two elements, both of which may impact AltaGas' business:

- A carbon levy applied to fossil fuels; and
- An output based pricing system for industrial facilities that emit above a certain threshold, with an opt-in capability for smaller facilities with emissions below the threshold.

The output based pricing system is expected to apply to all industrial facilities that emit 50,000 tonnes or more of carbon dioxide equivalent emissions (CO<sub>2</sub>e) per year. AltaGas has two processing facilities that would exceed the 50,000 tonnes of CO<sub>2</sub>e per year threshold. These two facilities were previously regulated under the SGER in Alberta; and will continue to be regulated under the CCIR in Alberta.

The federal carbon levy and the output-based pricing system will not come into effect before January 1, 2019.

The provinces of Quebec, Alberta and British Columbia, have already adopted carbon pricing plans, but the current price limit in each of those provinces is well below the minimum \$50 per tonne level required in 2023 as proposed by the federal government.

The impact of a federal carbon pricing structure is expected to be varied across AltaGas' business segments. The immediate carbon tax impact on AltaGas will mainly be on AltaGas' Midstream and Power segments, while AltaGas' utilities are expected to pass-through carbon tax to their customers.

**Time horizon**

Current

**Likelihood**

More likely than not

**Magnitude of impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

4,000,000

**Potential financial impact figure – maximum (currency)**

13,000,000

**Explanation of financial impact figure**

As International agreements evolve, increased regulation is expected to be the tactic that will be employed by governments to meet its reduction commitments. It remains unclear how federal regulations and provincial/state regulations will interact and which of the two will set precedent. Near impact on AltaGas net of contact recoveries and passthrough is ~4M but based on variable pricing schemes across AltaGas' operating areas, the impact could be as high as ~13M.

**Management method**

AltaGas continuously monitors proposed changes to environmental policy and regulations in order to identify, quantify, and manage material risks. Where risks are material, we comment on proposals independently, as well as through our industry associations.

**Cost of management**

100,000

**Comment**

There are no incremental costs associated with management of this risk; it is seen as an inherent part of management and is incorporated into operational budgets. The cost is estimated to be 100K, which is the expected time commitment for existing AltaGas staff. We anticipate this cost could increase over time.

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**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type**

Transition risk

**Primary climate-related risk driver**

Policy and legal: Enhanced emissions-reporting obligations

**Type of financial impact**

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

**Company- specific description**

Reporting requirements associated with emissions policy is considered to be a business risk, considering current policy direction in some of AltaGas' operating areas. AltaGas has operating assets in jurisdictions that have robust reporting obligations and in most cases our assets are regulated at both the federal and provincial/state levels. In Alberta, AltaGas has facilities that fall under the Carbon Competitiveness Incentive Regulation, which applies to facilities that emit over 100,000 tonnes of CO<sub>2</sub>e per year. We also have facilities that are regulated under the federal GHG Reporting program in Canada (under the Canadian Environmental Protection Act), which requires facilities over 10,000 tonnes of CO<sub>2</sub>e per year to report. AltaGas also has reporting obligations for its assets in the province of British Columbia under the Greenhouse Gas Industrial Reporting and Control Act, as well as Federal EPA GHG reporting requirements in the United States and Mandatory reporting requirements in the state of California under the Cap and Trade program.

Emission reporting obligations are an ongoing risk and have the risk to change abruptly due to political elections or through regulatory advancement over time in AltaGas' operating areas. The impact to AltaGas is increased operational cost associated with the development of systems and the dedicated time required by employees to comply with changing reporting obligations.

**Time horizon**

Short-term

**Likelihood**

Likely

**Magnitude of impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

250,000

**Potential financial impact figure – maximum (currency)**



500,000

**Explanation of financial impact figure**

Based on AltaGas' operating areas, the current regulatory reporting thresholds, and the current political uncertainty, AltaGas anticipates that the cost associated with emissions reporting will increase in the short term. The impact is anticipated to be a small increase in operational cost associated with the management and quantification to meet new reporting requirements. The costs above are built into AltaGas' operating cost and are estimated at \$250,000 currently, but could rise as high as \$500,000 under new regulatory reporting regimes.

**Management method**

AltaGas monitors and participates in stakeholder groups relating to emissions reporting obligations. Management of this risk is built into AltaGas operational expenses. AltaGas mitigates this risk by identifying public policy issues to determine risks to the corporation and develops advocacy strategies to address these risks. AltaGas also maintains a strong regulatory department that proactively engages regulatory and stakeholder groups to maintain strong working relationships.

**Cost of management**

200,000

**Comment**

The direct cost risk management cannot be quantified on a single risk basis. The cost to maintain a regulatory department and the time specifically dedicated to emissions reporting is estimated at 250k across the AltaGas organization.

**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: Costs to transition to lower emissions technology

**Type of financial impact**

Costs to adopt/deploy new practices and processes

**Company- specific description**

AltaGas has operations located in several jurisdictions across Canada and the United States, that are subject to various regional regulatory changes resulting in changes to equipment to reduce carbon emissions or specific criteria air contaminants (CAC's). These regulatory changes that are often in different stages of implementation, has led AltaGas to complete various engineering studies across its asset base, which has

caused early deployment of technology in the construction of new facilities or proactive retrofits at existing assets resulting in direct reduction in corporate wide air emissions. Projects are being identified on an ongoing basis that will result in more efficient operations from the reduction of methane, CAC's, and Volatile Organic Compounds, etc. This risk relates specifically to the potential financial implications associated with engineering and equipment modifications that are/may be required to address specific air pollutants of concern for an operating area. These pollutants can vary depending on location. Several examples of regulatory changes that result in costs associated with the transition to lower emissions technology are present in AltaGas operating areas, a few specific to Canadian Operations are: Multi Sector Air Pollutant Release Inventory (MSAPR), implemented by the federal government that is requiring specific limitations to NOx and may lead to equipment retrofit or modification. Methane reduction requirements in the province of Alberta is driving Methane Reduction Retrofit Compliance Plans, requiring organizations to replace certain venting mechanisms over time to comply with specific vent rates.

**Time horizon**

Short-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)****Potential financial impact figure – minimum (currency)**

1,000,000

**Potential financial impact figure – maximum (currency)**

3,000,000

**Explanation of financial impact figure**

The financial impact in Canada for operational modifications required to comply with the methane reduction regulations in Alberta or Retrofit requirements associated with MSAPR are estimated to range from 1 - 3MM. The financial impact is dependent on different modelling inputs, which include scenarios regarding technology types and timing of equipment retrofits.

**Management method**

AltaGas allocates resources to complete these programs on a planned basis, rather than employing reactive single replacement programs. Typically these risks are monitored across AltaGas by various groups and are communicated to management regularly so that planned programs can be implemented.

**Cost of management**

150,000

**Comment**

The cost of management is expected to be minimal for the project planning and coordination of these types of work. The cost to maintain various functions across different departments and the time dedicated to this work is estimated to be 150,000 per year.

## 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**

Energy source

**Primary climate-related opportunity driver**

Participation in carbon market

**Type of financial impact**

Returns on investment in low-emission technology

**Company-specific description**

AltaGas falls under regulatory regimes that incentivize investments in projects that reduce carbon emission. AltaGas has been, and continues to be, well positioned to develop a portfolio of offset projects that have provided a supply of emission offsets and emission performance credits (with revenue streams or otherwise net project savings), which are used to reduce AltaGas' annual greenhouse gas compliance cost. Should other jurisdictions advance with similar regulations, AltaGas would be well positioned to take advantage of those offset project opportunities.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium-low

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

15,000,000

**Potential financial impact figure – maximum (currency)**

20,000,000

**Explanation of financial impact figure**

Greenhouse gas emission regulations provide AltaGas with the opportunity to generate emission offset credits and emission performance credits. AltaGas currently uses internally generated credits to minimize its greenhouse gas compliance costs and exposure. Over the life cycle of these emission reduction projects AltaGas has generated between 15-20 million dollars' worth of credits.

**Strategy to realize opportunity**

We manage this opportunity by developing offset projects at facilities that we own and operate. Before construction of a new facility, or retrofitting an older facility, an efficiency review is conducted to best determine operational benefits from emission reduction projects.

**Cost to realize opportunity**

10,000,000

**Comment**

Managing a portfolio of greenhouse gas assets and liabilities requires the time and effort of 3 FTEs (Full Time Equivalents) at a cost of ~\$325,000. Offset projects undertaken to date have cost in excess of ~ \$10MM.

**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Ability to diversify business activities

**Type of financial impact**

Increased revenue through demand for lower emissions products and services

**Company-specific description**

As part of its climate change adaptation strategy, BC Hydro has undertaken internal studies and worked with some of the world's leading scientists in climatology, glaciology, and hydrology to determine how climate change affects water supply and the seasonal timing of reservoir inflows, and what we can expect in the future. The published document titled "the potential impacts of climate change on BC Hydro-Managed Water Resources", predicts precipitation in winter, spring, and fall will likely increase in all of BC Hydro's watersheds under all emission scenarios, which will likely see a modest increase in annual water supply for hydroelectric generating facilities. AltaGas designed its hydroelectric facilities based on hydrological studies and models that incorporated climate change predictions. Hydrological studies and data are also used throughout operations to confirm that sufficient water flow is available to generate adequate electricity to determine the economic viability of its projects.

**Time horizon**

Current

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

2,600,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

AltaGas Northwest British Columbia Hydro Electric Facilities had a fair market value of over 2.6 billion (as of June 13, 2018).

**Strategy to realize opportunity**

AltaGas designed these facilities based on hydrological studies and models that incorporated climate change predictions. Hydrological studies and data are also used throughout operations to confirm that sufficient water flow is available to generate adequate electricity and to determine the economic viability of its projects.

**Cost to realize opportunity**

1,000,000,000

**Comment**

AltaGas invested approximately \$1 billion in the Northwest Hydro Facilities, which includes numerous operational and mechanical facility improvements focused on increased efficiency and reliability. The continued improvements particularly at Forrest Kerr enhance value by positioning the assets to operate under a wider variety of environmental conditions.

As of December 31, 2018, AltaGas had 55% direct equity ownership in the Northwest British Columbia Hydro Electric Facilities.

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**Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Type of financial impact**

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

**Company-specific description**

Ridley Island Propane Export Terminal (RIPET) is located near Prince Rupert, British Columbia, and is the first propane export facility off the west coast of Canada. The facility will provides access to new global markets for producers, while also leveraging AltaGas' natural gas gathering, processing and fractionation assets in B.C. and Alberta. RIPET will provide AltaGas opportunities to optimize and grow its footprint, enhance its service offering and connect producers to new markets, including Asia. RIPET provides Western Canadian propane producers the opportunity to diversify their global market access by providing an alternative low carbon, clean-burning energy source. Compared to other fuels, propane's utilization helps to improve air quality, reduce greenhouse gas (GHG) emissions and protect the environment.

**Time horizon**

Current

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

75,000,000

**Potential financial impact figure – maximum (currency)**

100,000,000

**Explanation of financial impact figure**

In 2019, we expect approximately \$75-\$80 million of EBITDA to be generated from the first 8 months of operation. AltaGas expects EBITDA to increase to \$100 million per year in 2020.

**Strategy to realize opportunity**

AltaGas' integrated strategy in Western Canada provides producers with services across the energy value chain, including access to export markets overseas. The cornerstone of this strategy is RIPET. RIPET leverages AltaGas' existing gathering, processing and fractionation assets, while also providing higher netbacks and market optionality to customers.

**Cost to realize opportunity**

450,000,000

**Comment**

AltaGas is a leading North American clean energy infrastructure company with strong growth opportunities and a focus on owning and operating assets to provide clean and affordable energy to its customers. The Corporation's long-term strategy is to grow in attractive areas across its Utility, Midstream, and Power business segments seeking optimal capital deployment. AltaGas expects its investment in RIPET to be 450-500M.

## C2.5

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

	Impact	Description
Products and services	Impacted	Risk - AltaGas recognizes the importance of its image in the community. Being viewed as part of the community is critical to the organization's success and is a key component of AltaGas' sustainability framework. Reputation is central to AltaGas' relationships in the communities that we operate and directly affects our ability to do business, both today and in the future. The financial impact is the potential of having reduced operations, the inability to do business, or get new projects permitted. This would have negative financial impact to all of AltaGas' business divisions. AltaGas devotes a significant number of resources towards building long-term relationships, as well as protecting reputational risks.

		<p>Looking at the organization as a whole and using the same qualitative scale for determining “magnitude of impact” as sections 2.3a and 2.4b, the potential magnitude on the business resulting from this risk is expected to be medium.</p> <p>Opportunity - AltaGas falls under regulatory regimes that incentivize investments in projects that reduce carbon emission. AltaGas has been, and continues to be, well positioned to develop a portfolio of offset projects that have provided a supply of emission offsets and emission performance credits (with revenue streams or otherwise net project savings), which are used to reduce AltaGas’ annual greenhouse gas compliance cost. At current, this opportunity is applicable to AltaGas’ midstream business, but should other jurisdictions advance with similar regulations, AltaGas would be well positioned to take advantage of those offset project opportunities. AltaGas currently uses internally generated credits to minimize its greenhouse gas compliance costs and exposure. Over the life cycle of these emission reduction projects AltaGas has generated between 15-20 million dollars’ worth of credits. We manage this opportunity by developing offset projects at facilities that we own and operate. Before construction of a new facility, or retrofitting an older facility, an efficiency review is conducted to best determine operational benefits from emission reduction projects. Looking at the organization as a whole and using the same qualitative scale for determining “magnitude of impact” as sections 2.3a and 2.4b, the potential magnitude on the business resulting from this opportunity is expected to be low.</p>
Supply chain and/or value chain	Not yet impacted	<p>Extreme weather events could impact AltaGas’ supply chain which would limit our ability to secure product supply. To date AltaGas has not experienced any material disruption to the supply chain or value chain as a result of extreme weather events, but this risk has the potential to impact all three of AltaGas’ business divisions. AltaGas maintains comprehensive insurance programs to mitigate the risks that result from Natural Disasters. Looking at the organization as a whole and using the same qualitative scale for determining “magnitude of impact” as sections 2.3a and 2.4b, the potential magnitude on the business resulting from this risk is medium-high. Using the same time horizon scale as questions 2.3a and 2.4b, AltaGas can expect the time horizon of this risk to be medium-term.</p>
Adaptation and mitigation activities	Not yet impacted	<p>A change in the amount of precipitation could impact the economic performance of our power business, and more specifically the Northwest Hydro Facilities (195 MW Forrest Kerr hydro facility, 16 MW Volcano Creek hydro facility, 66 MW McLymont Creek hydro facility). A decrease in precipitation will result in lower snowpack and decreased river flows, lowering power production and decreasing financial performance. Business interruptions resulting from change in mean precipitation could impact revenue and increase operating cost. The</p>



		<p>exact financial impact depends on the affected facilities, market conditions, etc. AltaGas designed these facilities based on hydrological studies and models that incorporate climate change predictions. Hydrological studies and data are also used throughout operations to confirm that sufficient water flow is available to generate adequate electricity to determine the economic viability of its projects. We have legal contracts in place that address incidents of Force Majeure, in order to protect AltaGas. Using the same time horizon scale as questions 2.3a and 2.4b, AltaGas can expect the time horizon of this risk to be medium-term.</p> <p>As of December 31, 2018, AltaGas had 55% direct equity ownership in the Northwest British Columbia Hydro Electric Facilities.</p>
Investment in R&D	Not yet impacted	<p>As technology advances AltaGas may be required to invest in R&amp;D to ensure its operations are in compliance with strict emission reduction requirements or climate change policies that are emerging in its operating areas. To date, AltaGas' investments in R&amp;D have not been impacted which can likely be attributed to the early stages of policy development that will support some of the climate change goals that have been communicated in the jurisdictions in which we operate. AltaGas anticipates impact on investment to range between 1-3M in our midstream operations to acquire and deploy certain technologies or to retrofit existing assets as described in section 2.3a Risk 3. Using the same time horizon scale as questions 2.3a, AltaGas can expect the time horizon of this risk to be short-term.</p>
Operations	Impacted	<p>The impact of a federal carbon pricing structure is expected to be varied across AltaGas' business segments as the pricing structure catches up with provincial carbon pricing models already in place. The immediate carbon tax impact on AltaGas will mainly impact AltaGas' Gas and Power segments, while AltaGas' utilities are expected to pass-through carbon tax to their customers. As International agreements evolve, increased regulation is expected to be the tactic that will be employed by governments to meet its reduction commitments. It remains unclear how federal regulations and provincial/state regulations will interact and which of the two will set precedent. Near impact on AltaGas as a result of the Pan-Canadian Carbon Tax announcement is estimated to be 4M, but variable pricing schemes could bump impact up as high as 13M. AltaGas continuously monitors proposed changes to environmental policy and regulations in order to identify, quantify, and manage material risks. Where risks are material, we comment on proposals independently, as well as through our industry associations. Looking at the organization as a whole and using the same qualitative scale for determining "magnitude of impact" as sections 2.3a and 2.4b, the potential magnitude on the business is expected to be low.</p>
Other, please		

specify		
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## C2.6

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

	Relevance	Description
Revenues	Impacted	Specific to the generation of revenue, AltaGas has identified opportunities that could have potential to have a positive impact on AltaGas' revenue in the long-term. AltaGas has identified and invested in low-emission technology, as mentioned in 2.4a Opp 1, relating to participation in the carbon markets. Other areas that have the potential for revenue generation associated with increased revenues through the demand for lower emission products and services (2.4, Opp 2) and through the expansion of low emission good and services (2.4, Opp 3). The magnitude of impacts per annum, in addition to the financial implication (see section 2.4a), and are anticipated to be associated with greater access to consumers thereby increasing the price demanded for our products. The potential impacts associated with revenue are built into various AltaGas control mechanisms. All projects are assessed for a number of factors, including economic factors as well as corporate responsibility and sustainability. Looking at the organization as a whole and using the same qualitative scale for determining "magnitude of impact" as sections 2.3a and 2.4b, the potential magnitude on the business is expected to be medium-high.
Operating costs	Impacted	AltaGas has identified climate change related risks that fall into two general categories, regulation and taxation, which were discussed at length in section 2.3. Regulatory and taxation risks include increased operational cost association with the carbon tax (2.3a, Risk 1). As well as, the increased operations cost associated with increased reporting obligations (2.3a, Risk 2). The magnitude of carbon tax impact is estimated to be 4M to 13M per year. The current realized cost of increased reporting obligations is estimated to be 250 – 500 k. To manage the impacts related to taxation and regulation, AltaGas conducts regular asset reviews and also maintains personnel who have responsibilities to engage with regulatory bodies on policy that could impact AltaGas operations. Looking at the organization as a whole and using the same qualitative scale for determining "magnitude of impact" as sections 2.3a and 2.4b, the potential magnitude on the business is expected to be low.
Capital expenditures /	Impacted for some suppliers,	Climate related risks that have been quantified are considered during the allocation of capital for development at AltaGas.

capital allocation	facilities, or product lines	AltaGas' capital is allocated to projects with strong organic growth potential, strong expected risk-adjusted returns, and long-term, secure commercial underpinning. An example of capital allocation that incorporated climate related risk is RIPET, as described in 2.4 a Opp 3. AltaGas anticipates magnitude of impact from RIPET to be between 75-80 million in EBITA at the start of operation but growing to 100M by 2020. Looking at the organization as a whole and using the same qualitative scale for determining "magnitude of impact" as sections 2.3a and 2.4b, the potential magnitude on the business is expected to be medium.
Acquisitions and divestments	Impacted	The Corporation continually assesses the macro and micro-economic trends impacting its business and seeks opportunities to generate value for shareholders, including through acquisitions, dispositions or other strategic transactions. The magnitude of the work completed against this category is entirely dependent on the size of the acquisition or divestment. On larger acquisitions, this can have impacts to valuations in the tens to hundreds of millions of dollars. Looking at the organization as a whole and using the same qualitative scale for determining "magnitude of impact" as sections 2.3a and 2.4b, the potential magnitude on the business is expected to be medium.
Access to capital		Integral to AltaGas' strategy is maintaining financial strength and flexibility, an investment grade credit rating, and ready access to capital markets. Financial discipline and effective risk management are fundamental cornerstones of AltaGas. In addition, the corporation adheres to a strong set of core values, which reflect the commitment to corporate responsibility and sustainability. As the investment community continues to add focus to sustainability factors, the expansion of access to capital to companies with a strong track record of sustainability performance will increase. The magnitude of the impact of sustainability performance and the associated impact on access to capital is likely to be variable across AltaGas' businesses. Looking at the organization as a whole and using the same qualitative scale for determining "magnitude of impact" as sections 2.3a and 2.4b, the potential magnitude on the business is expected to be medium.
Assets	Impacted	Risk cases associated with the price of carbon as well as changing regulation have had, and will continue to have an impact on our businesses. As governments and cities strive to meet their commitments associated with COP21, AltaGas will

		see the energy landscape change across its operating areas. AltaGas will continue to see opportunities associated with this energy transition. AltaGas has and will continue to capitalize on these opportunities. An example is the Pomona Battery Storage facilities that AltaGas built and commissioned for a cost of ~40-45 M. Looking at the organization as a whole and using the same qualitative scale for determining “magnitude of impact” as sections 2.3a and 2.4b, the potential magnitude on the business is expected to be low-medium.
Liabilities	Not impacted	Liabilities are not currently impacted. Liabilities at AltaGas are continuously monitored and updated regularly. AltaGas continues to meet its financial and liability obligations across all of its businesses. AltaGas looks to reduce debt across its business when appropriate.
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, but we 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.**

AltaGas leverages the strength of its assets and expertise along the energy value chain to connect customers with premier energy solutions – from the wellsites of upstream producers to

the doorsteps of homes and businesses, to new markets around the world. This strategy is underpinned by the growing demand for clean, reliable and affordable energy and the mounting need for market optionality for North America's energy industry.

AltaGas' business strategy is underpinned by the growing demand for clean energy with natural gas as a key fuel source. The core of our Strategy is responding to regulatory and market changes that have resulted from Climate Change and Climate Change management efforts. The reference to "growing demand for clean energy..." in the AltaGas Strategy is a reference to the demand for lower carbon and low pollution energy. Therefore, climate change is literally integrated into our business Strategy, which assumes regulators and customers will value lower carbon energy (natural gas, Natural Gas Liquids (NGL's) or renewable energy) over higher carbon-intensive energy. Therefore, AltaGas intends to develop and operate larger gas infrastructure projects, as well as seek to move natural gas and NGL's to key markets. AltaGas is uniquely positioned to establish a western energy hub in northeast British Columbia, through the Ridley Island Propane Export Terminal, which will ultimately allow for delivery of cleaner burning fuels to overseas markets.

AltaGas' Board of Directors is actively engaged in an annual review of AltaGas' strategy. The Corporation continually assesses the macro and micro-economic trends impacting the businesses and seeks opportunities to generate value for shareholders. The opportunities AltaGas pursues must meet strategic, operating and financial criteria to ensure they align with the long-term strategy and provide ongoing organic growth potential, favorable risk profiles and strong risk-adjusted returns. AltaGas' balanced portfolio, including high-growth assets in the Midstream segment combined with predictable and regulated returns in the Utilities segment, provides a resilient and diversified platform for growth. Therefore, AltaGas' strategic direction must be based on an understanding of the short and long-term viability of clean energy in our Midstream, Utilities and Power segments.

In mid-2018, AltaGas closed its pending acquisition of WGL Holdings, Inc. AltaGas now has infrastructure assets in some of the fastest growing energy markets in North America, including prominent positions in the Montney and Marcellus/Utica basins, and utility operations in five states. AltaGas is developing an integrated footprint capable of delivering sustained value to shareholders and customers alike. However, because business in natural gas and NGL's are not without carbon emissions, carbon prices (either identified by regulatory bodies, or assumed based on conservative models), changing regulatory requirements, and customer trends are identified by our project teams and incorporated into business and financial models. AltaGas assumes compliance costs related to mitigating climate change. These compliance costs are generally represented by a carbon price that is incorporated into our projects.

Regulatory compliance also plays a role in influencing climate change strategy at AltaGas. Strict emission reduction targets at our Gas and Power facilities have prompted investment in cleaner technologies such as cogeneration, natural gas-fired power generation, Carbon Capture and Storage projects, as well as continual operational improvements across the AltaGas Enterprise.

To achieve this overarching strategy, AltaGas is focused on five strategic imperatives:

#### Delivering Operational Excellence

AltaGas is focused on continually improving how it operates, in order to deliver products and services as safely, efficiently and reliably as possible.

#### Maximizing the Value of the Asset Footprint

AltaGas' strategy is focused on two core and complementary business segments, Midstream and Utilities. Specifically, AltaGas is targeting opportunities to develop high-quality energy assets that complement its existing integrated infrastructure footprint, and to consolidate its position in key markets to deliver optimal growth over the long term.

#### Advancing AltaGas' Transformation

On July 6, 2018, AltaGas announced the closing of the acquisition of WGL Holdings, Inc. With the transaction complete, AltaGas is focused on integration, achieving synergies and moving forward as one company with one vision and one strategy.

#### Enhancing Financial Strength

With high-quality assets and numerous attractive opportunities for organic growth, a strong balance sheet is crucial. As a growth-oriented energy infrastructure company, AltaGas creates value for investors through minimizing the cost of capital and maximizing return on invested capital in a timely manner.

#### Responsibility for People, Communities and Environment

The Corporation adheres to a strong set of core values, which reflect the commitment to corporate responsibility and sustainability.

## C3.1g

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

Although AltaGas has not used Climate-related Scenario Analysis to inform its business strategy it has implemented an effective Risk Management process. AltaGas' risk management is governed by the Board of Directors, who are responsible for identifying, and understanding the principal risks associated with AltaGas' business and reviewing and approving the implementation of systems to manage risks. The board of directors receives reports on risk matters from both the committees of the board of directors and from management. The duties and responsibilities of the Board of Directors Audit Committee is the oversight of risk management, including a review of the Corporation's major risks, a review of the method of risk analysis by the Corporation, and review of the strategies, policies and practices in place for risk management. AltaGas actively manages its exposure to risk by focusing on mitigating measures that are required to reduce or eliminate risk to acceptable and manageable levels. AltaGas understands that Scenario Analysis is recommended practice by CDP for corporate climate governance. AltaGas is continuing to evaluate and is expecting to implement Climate Related Scenario analysis in the next two years.

As part of the merger commitments in Washington Gas/WGL operating areas, AltaGas (WGL) has committed to undertake specific scenario related studies. We will use the learnings from these scenario analyses to inform any future studies that AltaGas may undertake.

## C4. Targets and performance

### C4.1

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

Absolute target

#### C4.1a

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

---

**Target reference number**

Abs 1

**Scope**

Scope 1

**% emissions in Scope**

6

**Targeted % reduction from base year**

6

**Base year**

2018

**Start year**

2018

**Base year emissions covered by target (metric tons CO<sub>2</sub>e)**

120,118.87

**Target year**

2018

**Is this a science-based target?**

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

**% of target achieved**

100

**Target status**

Achieved

**Please explain**

AltaGas was 8083 tonnes of CO<sub>2</sub>e below its target and applied to receive 8083 Emission performance credits from the government of Alberta.

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**Target reference number**

Abs 2

**Scope**

Scope 1

**% emissions in Scope**

18

**Targeted % reduction from base year**

9

**Base year**

2018

**Start year**

2018

**Base year emissions covered by target (metric tons CO<sub>2</sub>e)**

375,582.65

**Target year**

2018

**Is this a science-based target?**

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

**% of target achieved**

100

**Target status**

Achieved

**Please explain**

AltaGas was 35,871 tonnes of CO<sub>2</sub>e below its target and applied to receive 35,871 Emission performance credits from the government of Alberta.

## 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.**

AltaGas targets mentioned above are for total GHG's including methane. AltaGas is currently developing a methane reduction retrofit compliance plan that will identify equipment that requires replacement or retrofit in order to achieve equipment specific vent gas limits. The plan will include a schedule to replace or retrofit existing equipment and also a commitment of resources to ensure goals are achieved.

## 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 CO<sub>2</sub>e savings.**

	Number of initiatives	Total estimated annual CO <sub>2</sub> e savings in metric tonnes CO <sub>2</sub> e (only for rows marked *)
Under investigation	1	60,518.06
To be implemented*	1	951.87
Implementation commenced*	1	11,034
Implemented*	1	35,781
Not to be implemented		

### C4.3b

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

#### Initiative type

Energy efficiency: Processes

#### Description of initiative

Fuel switch

#### Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)

35,781

**Scope**

Scope 1

**Voluntary/Mandatory**

Voluntary

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

1,073,430

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

3,000,000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

&gt;30 years

**Comment**

Process improvements at the Harmattan Gas Plant such as retiring gas fired compression, shutting down the CO2 plant and bringing on Electric drive compressors, assisted the plant in meeting its established target. Cost to improve plant process is estimated at 3M.

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

Method	Comment
Compliance with regulatory requirements/standards	Compliance is the foundation of how we do business. In addition to complying with laws and regulations, AltaGas has a set of core values that applies to all areas of our organization. AltaGas tries to meet and exceed emission reduction activities that are required by regulators.
Internal finance mechanisms	At AltaGas we are always looking at opportunities to improve shareholder value, while effectively managing risk. Carbon prices employed by internal finance mechanisms can signal considerations for emissions reduction activities.
Financial optimization calculations	AltaGas' objective is to generate superior economic returns by investing in low-risk energy assets.
Employee engagement	All employees are welcome to identify GHG reduction efforts.
Internal incentives/recognition programs	Financial incentives are indirectly linked to GHG reduction targets.

## 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?**

Yes

## C4.5a

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

---

**Level of aggregation**

Group of products

**Description of product/Group of products**

Hydrocarbon based products (NGLs, LPG's, Pentane, etc.)

**Are these low-carbon product(s) or do they enable avoided emissions?**

Low-carbon product

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify

Comparing carbon intensity to coal

**% revenue from low carbon product(s) in the reporting year**

33

**Comment**

AltaGas' wide array of hydrocarbon based products provides the opportunity for third-party users to choose less carbon-intensive products which can directly lower the amount of GHG emissions.

## C-EU4.6

**(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.**

This question is not scored for AltaGas' disclosure

## C-OG4.6

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

AltaGas is targeting vent gas and fugitive emissions to reduce methane emissions. AltaGas is working to inventory all of equipment that would routinely vent to identify project opportunities for replacement or upgrade to existing high bleed devices with no or low bleed alternatives. Currently, AltaGas tests compressor seals that emit vent gas annually in the

province of British Columbia to ensure seal integrity and to reduce vent gas leakage. AltaGas also completes systematic leak detection and repair of fugitive emission leaks across its operations. Regular screening of sites reduces fugitive emissions and helps to reduce methane emissions associated with unintentional leaks.

## 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.**

AltaGas completes fugitive emissions surveying, using infrared fugitive emission detection and or acoustic leak detection devices when necessary. AltaGas' Fugitive Emission Management Program identifies potential sources of fugitive emissions in the Methane value chain, accurately quantifies emissions/leak rates, completes cost/benefit analysis per leak source and tracks repairs using corrective action tracking. AltaGas' Leak Detection and Repair Program procedure was developed to:

- Ensure all applicable components are being tested, reported and tracked on an annual basis;
- Track all repairs using a "Repair Tracking Form" provided in the LDAR Report, and;
- Confirm all regulations and best management practices are being followed.

Leak Detection is executed across AltaGas' operations annually and a decision tree is used to determine how leaking components are addressed. For facilities that do not have a regulatory commitment to conduct leak surveys annually, AltaGas has instituted a rolling schedule to ensure all facilities are visited within an appropriate timeframe. It is estimated that annually 50% or more of the assets in the Gas segment are covered under this program.

All areas in which the Gas Division operates have regulatory requirements associated with the management of fugitive emissions. AltaGas' LDAR procedure was developed to meet or exceed jurisdictional requirements.

### 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.**

AltaGas follows regulatory targets of 0.5% of throughput at each individual facility. In addition to applicable regulatory targets AltaGas also reviews findings associated with Emission

Verification. In 2018, our Gordondale Gas plant reduced flare volumes again by increasing flare as well as introducing more effective planned maintenance activities.

## 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, 2008

**Base year end**

December 31, 2008

**Base year emissions (metric tons CO<sub>2</sub>e)**

1,178,156

**Comment**

#### Scope 2 (location-based)

---

**Base year start**

January 1, 2013

**Base year end**

December 31, 2013

**Base year emissions (metric tons CO<sub>2</sub>e)**

244,256

**Comment**

#### Scope 2 (market-based)

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

## 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.**

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

Canadian Association of Petroleum Producers, Calculating Greenhouse Gas Emissions, 2003

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

US EPA Mandatory Greenhouse Gas Reporting Rule

Other, please specify

## C5.2a

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

Alberta Carbon Competitiveness Incentive Regulation; Western Climate Initiative:

Quantification Method 2013 Addendum to Canadian Harmonization Version; California

Mandatory Greenhouse Gas Reporting Regulation.

## C6. Emissions data

### C6.1

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO<sub>2</sub>e?**

**Reporting year**

**Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

2,094,111

**Start date**

January 1, 2018

**End date**

December 31, 2018

**Comment**

### C6.2

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

**Row 1**

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We 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 CO<sub>2</sub>e?**

**Reporting year**

---

**Scope 2, location-based**

267,601

**Start date**

January 1, 2018

**End date**

December 31, 2018

**Comment**

## 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**

WGL

**Relevance of Scope 1 emissions from this source**

Emissions excluded due to recent acquisition

**Relevance of location-based Scope 2 emissions from this source**

Emissions excluded due to recent acquisition

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

### Explain why this source is excluded

The AltaGas acquisition of WGL closed in July 2018 and therefore emissions sources have been excluded in our 2018 disclosure.

## C6.5

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

#### Purchased goods and services

---

##### Evaluation status

Not relevant, explanation provided

##### Explanation

AltaGas' strategy for greenhouse gas management is to continuously reduce GHG emissions from our operating facilities. Measurement and monitoring at facilities that are under our operational control are the focus so we can apply new technology and find energy efficiency improvements.

#### Capital goods

---

##### Evaluation status

Not relevant, explanation provided

##### Explanation

Tracking these emissions is not material to our GHG management efforts. Scope 3 emissions from major capital goods on an annual basis are not a meaningful metric for our business.

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

---

##### Evaluation status

Not relevant, explanation provided

##### Explanation

Our 50% interest in the Power Purchase Agreement for the Sundance Units 3 and 4 was terminated in 2016. Therefore this emission source is no longer relevant to AltaGas.

#### Upstream transportation and distribution

---

##### Evaluation status

Not relevant, explanation provided

##### Explanation



At AltaGas, our business activities are services offered within the upstream transportation and distribution space. Management of our Scope 1 emissions plays a large role in the management of Scope 3 emissions for users further down the value chain. Scope 3 GHG emissions associated with upstream transportation and distribution of AltaGas' energy resources are not material.

---

## **Waste generated in operations**

### **Evaluation status**

Not relevant, explanation provided

### **Explanation**

AltaGas is required to track all waste generated in operations. The waste generation information has been reviewed and the emissions associated with waste generation are not material to our GHG management efforts.

---

## **Business travel**

### **Evaluation status**

Not relevant, explanation provided

### **Explanation**

AltaGas has historically reported in error its fleet vehicle emissions as business travel. The emissions associated with our fleet come from a third party company that manages our fleet information. The associated emissions from our fleet have been included in Scope 1 emissions summary.

---

## **Employee commuting**

### **Evaluation status**

Not relevant, explanation provided

### **Explanation**

Tracking these emissions is not material to our GHG management efforts.

---

## **Upstream leased assets**

### **Evaluation status**

Not relevant, explanation provided

### **Explanation**

Tracking these emissions is not material to our GHG management efforts.

---

## **Downstream transportation and distribution**

### **Evaluation status**

Not relevant, explanation provided

**Explanation**

Tracking these emissions is not material to our GHG management efforts.

**Processing of sold products**

---

**Evaluation status**

Not relevant, explanation provided

**Explanation**

Our products are generally consumed by downstream users and are typically not processed

**Use of sold products**

---

**Evaluation status**

Relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

4,744,691

**Emissions calculation methodology**

EPA Mandatory Greenhouse Gas Reporting Subpart NN reporting rules for US based Utilities.

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

0

**Explanation**

Emissions are calculated based on the quantity of gas sold to residential and business customers (energy units) by our Utility Businesses (fully owned subsidiaries of AltaGas).

**End of life treatment of sold products**

---

**Evaluation status**

Not relevant, explanation provided

**Explanation**

Our products are generally consumed by downstream users. Therefore typically there is no product to be considered at the "end of life."

**Downstream leased assets**

---

**Evaluation status**

Not relevant, explanation provided

**Explanation**

We do not lease downstream assets.

## Franchises

---

### Evaluation status

Not relevant, explanation provided

### Explanation

We do not have franchises.

## Investments

---

### Evaluation status

Not relevant, explanation provided

### Explanation

Tracking these emissions is not material to our GHG management efforts.

## Other (upstream)

---

### Evaluation status

### Explanation

## Other (downstream)

---

### Evaluation status

### 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 CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

---

### Intensity figure

0.00055

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

2,361,677

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

4,257,000,000

**Scope 2 figure used**

Location-based

**% change from previous year**

40.54

**Direction of change**

Decreased

**Reason for change**

The percent change in the emission intensity figure is primarily due to a slight decrease in the gross S1 and S2 emissions from 2017 to 2018 and the Gross revenue increase from 2017 to 2018. The decrease can be attributed to a large increase in gross revenue from 2017 to 2018; the revenue figure includes the partial contribution from WGL in the 2018 operating year.

**C-OG6.12**

**(C-OG6.12) Provide the intensity figures for Scope 1 emissions (metric tons CO<sub>2</sub>e) per unit of hydrocarbon category.**

**C-OG6.13**

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

**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	Scope 1 emissions (metric tons of	GWP Reference
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gas	CO2e)	
CO2	1,892,642	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	181,413	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	20,057	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	0	IPCC Fourth Assessment Report (AR4 - 100 year)

## C-EU7.1b

**(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.**

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives					Not scored
Combustion (Electric utilities)					not scored
Combustion (Gas utilities)					not scored
Combustion (Other)					not scored
Emissions not elsewhere classified					not scored

## 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.**

## 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	938,619

United States of America	1,155,492
--------------------------	-----------

## 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 CO <sub>2</sub> e)
AltaGas - Midstream Division	938,619
AltaGas - Power Division	1,095,101
AltaGas - Utilities	60,391

## 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 CO<sub>2</sub>e.**

	Gross Scope 1 emissions, metric tons CO <sub>2</sub> e	Comment
Electric utility generation activities		Not scored
Oil and gas production activities (upstream)		Not scored
Oil and gas production activities (downstream)		Not scored

## C7.5

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

Country/Region	Scope 2, location-based (metric tons CO <sub>2</sub> e)	Scope 2, market-based (metric tons CO <sub>2</sub> e)	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 ☞ <sup>1</sup>	264,479	0	335,139	78,432
United States of	3,122	0	5,735	0

America				
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<sup>1</sup>2187,05 MWh purchased and consumed from BC Hydro. the emissions are calculated using location based emission factors.

## 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)
AltaGas - Gas Division	264,479	0
AltaGas - Power Division	878	0
AltaGas - Utilities	2,245	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)	0	0	
Oil and gas production activities (downstream)	264,479	0	

## 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?**

Decreased

## 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 CO <sub>2</sub> e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	3,649	Decreased	79.91	In 2018 AltaGas purchased and consumed less energy in the province of British Columbia due to the change in ownership of a large midstream asset and therefore there change in renewable energy consumption decreased. This is calculated as such $917.66 - 4567.04 / 4567.04 * 100 = -79.91$
Other emissions reduction activities	43,864	Decreased	1.84	In 2018 AltaGas applied for 43864 Emission performance credits as a result of efficient operations of AltaGas' large final emitter facilities in Alberta. AltaGas' combined S1 and S2 emissions from the previous year were 2384722 tCO <sub>2</sub> e. Therefore, $43864 / 2384722 * 100 = 1.84$ .
Divestment	490,214.24	Decreased	20.56	Asset divestment in our Power and Utility Divisions in 2018 resulted in a decrease of 20.56% in our gross global S1 and S2 emissions. The divestment accounted for 490,214.24 tCO <sub>2</sub> e. Therefore, $490214.24 / 2374722 * 100 = 20.56$
Acquisitions				
Mergers				
Change in output	474,187	Increased	20.08	Across all AltaGas business unit there were relative changes in output. There was a 20.08 percent increase in production across all divisions, but can mostly be attributed to increased production from our power facilities in California and full year contributions from new commissioned assets in British Columbia. This is calculated as such $2361713 - 1887526.18 / 2361713 * 100$ .
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 5% but less than or equal to 10%

### 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	6,772,570	6,772,570
Consumption of purchased or acquired electricity		78,432	265,750	344,182
Consumption of self-generated non-fuel renewable energy		6,517		6,517
Total energy consumption		84,949	7,038,320	7,123,269

## C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

## C8.2c

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

---

### Fuels (excluding feedstocks)

Natural Gas

### Heating value

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

6,772,570

**MWh fuel consumed for self-generation of electricity**

5,952,771

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

795,000

**Comment**

---

**Fuels (excluding feedstocks)**

Diesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

3,133

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Comment**

---

**Fuels (excluding feedstocks)**

Motor Gasoline

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

21,665

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Comment**

## **C8.2d**

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

### **Diesel**

---

**Emission factor**

0.0026

**Unit**

metric tons CO<sub>2</sub>e per liter

**Emission factor source**

Canada National Inventory Report

**Comment**

### **Motor Gasoline**

---

**Emission factor**

0.0023

**Unit**

metric tons CO<sub>2</sub>e per liter

**Emission factor source**

Canada National Inventory Report

**Comment**

### **Natural Gas**

---

**Emission factor**

0.00189

**Unit**

metric tons CO<sub>2</sub>e per m<sup>3</sup>

**Emission factor source**

Canada National Inventory Report

**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	5,279,000	138,342	1,551,000	6,517
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

## C-EU8.2e

(C-EU8.2e) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

### Coal – hard

---

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)

Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)

Comment

Not scored

### Lignite

---

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

Not scored

**Oil**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

Not scored

**Gas**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

Not scored

**Biomass**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO2e)**

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

**Comment**

Not scored

**Waste (non-biomass)**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO2e)**

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

**Comment**

Not scored

**Nuclear**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO2e)**

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

**Comment**

Not scored

**Geothermal**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

Not scored

**Hydroelectric**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

Not scored

**Wind**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**



**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO2e)**

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

**Comment**

Not scored

**Solar**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO2e)**

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

**Comment**

Not scored

**Other renewable**

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO2e)**

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

**Comment**

Not scored

### Other non-renewable

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

Not scored

### Total

---

**Nameplate capacity (MW)**

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

**Comment**

Not scored

## **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.**

---

### **Basis for applying a low-carbon emission factor**

Contract with suppliers or utilities (e.g. green tariff), not supported by energy attribute certificates

**Low-carbon technology type**

Hydropower

**Region of consumption of low-carbon electricity, heat, steam or cooling**

North America

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**

78,432

**Emission factor (in units of metric tons CO<sub>2</sub>e per MWh)**

0.12

**Comment**

Power purchased and consumed from BC Hydro, the utility provider in the province of British Columbia is low carbon generated electricity. 98 percent of grid electricity in British Columbia is generated from clean power sources.

**C-EU8.4**

**(C-EU8.4) Does your electric utility organization have a transmission and distribution business?**

No

**C9. Additional metrics****C9.1**

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

**C-EU9.5a**

**(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.**

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
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**C-EU9.5b**

**(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).**

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
-----------------------	--------------------------------	-----------------------------------	---	------------------------

## 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.**

### Investment start date

August 16, 2016

### Investment end date

December 31, 2016

### Investment area

Equipment

### Technology area

Energy storage

### Investment maturity

Large scale commercial deployment

### Investment figure

45,000,000

### Low-carbon investment percentage

81-100%

### Please explain

AltaGas built, owns and operates the Pomona Energy Storage Facility. With 20 MW of capacity, it is among the largest battery storage facilities in North America and is able to provide 80 MWh of electricity over a continuous four hour period.

## C10. Verification

### C10.1

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

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

## C10.1a

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

---

**Scope**

Scope 1

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 Verification+statement-Blythe\_Ver+1.\_+2019-06-26IExec.pdf

**Page/ section reference**

Page 1 of 1

**Relevant standard**

California Mandatory GHG Reporting Regulations (CARB)

**Proportion of reported emissions verified (%)**

52

 Verification+statement-Blythe\_Ver+1.\_+2019-06-26IExec.pdf

---

**Scope**

Scope 1

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 Harmattan Verification statement.pdf

**Page/ section reference**

Pages 1 thru 3.

Alberta's Regulation changed from Specified Gas Emitter Regulation to the Carbon competitiveness Incentive Regulation. Verification is still based on ISO 14064-3.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

18

 Harmattan Verification statement.pdf

---

**Scope**

Scope 1

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 BC Verification statement.pdf

**Page/ section reference**

Pages 1 thru 10

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

11

 BC Verification statement.pdf

---

**Scope**

Scope 1

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 Gordondale Verification Statement.pdf

**Page/ section reference**

Pages 1 thru 3

Alberta's Regulation changed from Specified Gas Emitter Regulation to the Carbon competitiveness Incentive Regulation. Verification is still based on ISO 14064-3.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

6

 Gordondale Verification Statement.pdf

**Scope**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 Harmattan Verification statement.pdf

**Page/ section reference**

Page 1 thru 3. Cogeneration power generation which is used to power the facility is verified. Electricity generated is provided free emission allocations based on a good as best gas emissions factor, as assigned by the Alberta Climate Change office.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

45

 Harmattan Verification statement.pdf

## 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, but we are actively considering verifying within the next two years

## 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

BC carbon tax

California CaT

Other ETS, please specify

Alberta Carbon Competitiveness Incentive Regulation (CCIR), which replaced Alberta SGER in Jan 1, 2018.

### C11.1b

**(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.**

#### California CaT

---

**% of Scope 1 emissions covered by the ETS**

52

**Period start date**

January 1, 2018

**Period end date**

December 31, 2018

**Allowances allocated**

0

**Allowances purchased**

388,000

**Verified emissions in metric tons CO<sub>2</sub>e**

1,095,101.4



**Details of ownership**

Facilities we own and operate

**Comment****Other ETS, please specify**

---

**% of Scope 1 emissions covered by the ETS**

24

**Period start date**

January 1, 2018

**Period end date**

December 31, 2018

**Allowances allocated**

0

**Allowances purchased**

0

**Verified emissions in metric tons CO<sub>2</sub>e**

495,701.52

**Details of ownership**

Facilities we own and operate

**Comment**

Alberta Carbon Competitiveness Incentive Regulation (CCIR) replaced Alberta SGER in Jan 1, 2018.

**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**

10

**Total cost of tax paid**

250,000

**Comment**

It's worth noting that although AB Carbon tax is intended to be inclusive many upstream and midstream organization are currently exempt from paying the Carbon Tax until January 1, 2023 while the province works to reduce methane emissions. AltaGas is required to make payment for Carbon tax on a limited number of assets under this exemption.

**BC carbon tax****Period start date**

January 1, 2018

**Period end date**

December 31, 2018

**% of emissions covered by tax**

11

**Total cost of tax paid**

6,735,261.55

**Comment**

The total cost paid does not account for cost recovery mechanisms that AltaGas may have in place at its facilities.

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

AltaGas applies a multi-pronged strategy for complying with the schemes in which we participate. First, AltaGas has made significant investments in energy efficiency and sequestration projects (in Alberta) which generate a long-term supply of emission offset credits and emission performance credits, which we use to offset a portion of our greenhouse gas compliance costs. Second, the commercial agreements we put in place to purchase third party generated emission offsets or emission performance credits include language that requires the seller to either compensate or replace any offset(s) and/or credit(s) that are revoked by the Regulator. Third, we include language in our commercial agreements requiring third parties to deliver their emission offsets or emission performance credits just a few weeks prior to the actual GHG compliance deadline in order to reduce our inventory carrying costs. Fourth, all activities associated with emissions trading and compliance, are managed internally, rather than through third parties.

**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 purchase

**Project type**

Forests

**Project identification**

CAFR5207-A

**Verified to which standard**

ACR (American Carbon Registry)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

2

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

2

**Credits cancelled**

Not relevant

**Purpose, e.g. compliance**

Compliance

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Other, please specify  
Ozone Depleting Substances Project

**Project identification**

CAOD5326-A

**Verified to which standard**

ACR (American Carbon Registry)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

10,818

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

10,818

**Credits cancelled**

Not relevant

**Purpose, e.g. compliance**

Compliance

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Other, please specify

Ozone Depleting Substances Project

**Project identification**

CAOD5327-A

**Verified to which standard**

ACR (American Carbon Registry)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

32,918

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

32,918

**Credits cancelled**

Not relevant

**Purpose, e.g. compliance**

Compliance

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Other, please specify

Livestock Projects

**Project identification**

CALS5345-A

**Verified to which standard**

ACR (American Carbon Registry)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

2,262

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

2,262

**Credits cancelled**

Not relevant

**Purpose, e.g. compliance**

Compliance

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Forests

**Project identification**

CAFR5283-A

**Verified to which standard**

ACR (American Carbon Registry)

**Number of credits (metric tonnes CO<sub>2</sub>e)**

125,000

**Number of credits (metric tonnes CO<sub>2</sub>e): Risk adjusted volume**

125,000

**Credits cancelled**

Not relevant

**Purpose, e.g. compliance**

Compliance

## C11.3

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

Yes

## C11.3a

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

---

**Objective for implementing an internal carbon price**

Navigate GHG regulations

Stakeholder expectations  
 Drive energy efficiency  
 Drive low-carbon investment  
 Identify and seize low-carbon opportunities

### **GHG Scope**

Scope 1  
 Scope 2  
 Scope 3

### **Application**

AltaGas uses internal prices on carbon that pertain to various aspects of our business and includes Scope 1, Scope 2, and Scope 3 emissions. AltaGas employs internal prices of carbon in our budgeting and forecasting in each of the regulatory jurisdictions where we own and/or operate assets. Carbon tax costs to our business are included in project budgets and forecasts.

### **Actual price(s) used (Currency /metric ton)**

50

### **Variance of price(s) used**

Different carbon prices are used over time and across geographies. When carbon prices are uncertain, we will employ scenarios that consider varying carbon prices that range from current price of \$30 per tonne up to future prices of \$50 per tonne.

### **Type of internal carbon price**

Shadow price  
 Internal trading

### **Impact & implication**

AltaGas uses internal prices on carbon that pertain to various aspects of our business and includes Scope 1, Scope 2, and Scope 3 emissions. AltaGas employs internal prices of carbon in our budgeting and forecasting in each of the regulatory jurisdictions where we own and/or operate assets. Carbon tax costs to our business are included in affected project budgets and forecasts. The carbon prices that reflect credits towards our financial exposure to greenhouse gas compliance costs (e.g., offsets) are accounted for and retained following best practice. Different carbon prices are used over time and across geographies. When carbon prices are uncertain, we will employ scenarios that consider varying carbon prices. Scenarios have included British Columbia's CO<sub>2</sub>e carbon tax and Alberta's increasing carbon prices, and the Pan-Canadian carbon pricing scheme (rising to \$50 in 2022). AltaGas' carbon credit pricing in the offset and the California Cap and Trade markets are subject to confidentiality. Our Commercial teams, in consultation with our Environmental and Regulatory staff, determine the carbon price on a project by project basis. Carbon compliance pricing is internalized (i.e., it is a budget line item) in the economics of the investment decisions that AltaGas makes.

## C12. Engagement

### C12.1

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

Yes, our customers

Yes, other partners in the value chain

### C12.1b

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

---

##### Type of engagement

Education/information sharing

##### Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

##### % of customers by number

100

##### % Scope 3 emissions as reported in C6.5

100

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

AltaGas engages with its customers to communicate the environmental benefits of fuel switching from more carbon intensive fossil fuels to natural gas.

##### Impact of engagement, including measures of success

Active engagement with our customers, particularly in our US utility businesses, has positively impacted our Utilities customer base. Switching customers to natural gas from higher carbon intensive fuels, such as fuel oil, can have a significant impact on CO<sub>2</sub>e emissions in our operating areas.

### C12.1c

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

Engagement is prioritized with stakeholders that are presented an opportunity to avoid GHG emissions (such as customers of our renewable electricity, or new natural gas customer's fuel switching from heating oil). In addition, priority is given to engagement with customers and suppliers that could be indirectly impacted by GHG laws and regulations, to the extent such

changes result in reductions in the use of natural gas by customers or limit the operations of, or increase the costs of goods and services acquired from AltaGas suppliers, such as pipelines and natural gas producers.

## 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
Regulation of methane emissions	Support	Participate in a committee composed of upstream and midstream organization across Alberta to provide guidance and industry perspective with respect to proposed methane emission reduction regulations.	To meet the goal set out by the Government of Alberta, the Alberta Energy Regulator developed regulatory requirements within Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting, and Directive 017: Measurement Requirements for Oil and Gas Operations. Draft requirements were released for public comment in April 2018, and in December, 2018, we released the revised editions. The new edition of Directive 060 comes into effect on January 1, 2020, including the methane reduction requirements. The new edition of Directive 017 is effective immediately following its release. The requirements address the primary sources of methane emissions from Alberta's upstream oil and gas industry: fugitive emissions and venting, which includes emissions from compressors, pneumatic devices, and glycol dehydrators. The requirements also focus on improved measurement, monitoring, and reporting of methane emissions.

### C12.3b

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



Yes

## C12.3c

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

---

**Trade association**

Clean Energy BC

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

CEBC is advocating (via website publications and speeches) the following with respect to new climate change policy in BC: Ensure there is opportunity for the Clean Energy sector in BC's new Climate Action Plan; increase demand for electricity. 1. Advocate for increasing use of electricity to power BC industries, transportation, transit, buildings, and homes because it is climate friendly power. 2. Inform the government, opposition parties and public in BC about the value of the clean and renewable energy sector to BC's economy and society. 3. Capitalize upon the new federal government's commitment to green infrastructure and clean energy by working to secure investments helpful to BC.

**How have you influenced, or are you attempting to influence their position?**

Via active membership on the board, AltaGas helped develop and approve this position.

---

**Trade association**

BC LNG Alliance

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The Alliance's position on climate change legislation supports those mechanisms that promote the reduction of GHG emissions in other jurisdictions (such as Asia) through the future use of LNG from BC rather than other hydrocarbons such as coal. This is communicated in speeches and website publications.

**How have you influenced, or are you attempting to influence their position?**

Via active membership on the board, AltaGas helped develop and approve this position.

## 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?**

Statements or positions communicated by AltaGas in direct and indirect activities that influence policy are managed by our use of Key Messages. Key Messages are developed by multi-disciplinary teams including communications staff, senior staff, subject matter experts, impacted or informing business divisions, etc. Key Messages that relate to our climate change strategy are reviewed and approved by team members accountable to the climate change strategy.

## C12.4

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

---

### Publication


In mainstream reports, in line with the CDSB framework (as amended to incorporate the TCFD recommendations)

### Status

Complete

### Attach the document

2

 AIF 2018 (FINAL).pdf

 AltaGas Annual Report 2018.pdf

### Page/Section reference

AIF - Pg. 42,62,72,73

Annual Report -Pg. 31, 49

### Content elements

Governance

Strategy

Risks & opportunities

### Comment

## 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.**

The online response system has carry over comments from the 2018 questionnaire in our 2019 response. Question 7.5 shows there is a comment (carry over from 2018 response), question 7.5 doesn't not have a comment box selection on the 2019 response page.

## 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	Senior Vice President EHS	Business unit manager

## 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	Non-public	Investors

**Please confirm below**

I have read and accept the applicable Terms