

C0. Introduction

C0.1

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

Keyera operates an integrated Canadian-based energy infrastructure business with extensive interconnected assets and depth of expertise in delivering energy solutions. Our predominantly fee-for-service-based business consists of natural gas gathering and processing; natural gas liquids processing, transportation, storage and marketing; iso-octane production and sales; and an industry-leading condensate system in the Edmonton/Fort Saskatchewan area of Alberta. In 2021, we employed over 1,000 people at 20 facilities and offices across Alberta, Oklahoma, and Texas. We strive to provide high-quality, value-added services to our customers across North America and are committed to conducting business ethically, safely, and in an environmentally and financially responsible manner.

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	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2021	December 31 2021	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

- 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 chosen approach for consolidating your GHG inventory.

- Operational control

C-OG0.7

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

Row 1

Oil and gas value chain

- Midstream
- Chemicals

Other divisions

- Carbon capture and storage/utilization

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	ISIN: CA4932711001

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	In 2021, the Board approved the creation of a new Committee, the Governance and Sustainability Committee (GSC) to assist the Board in its oversight of ESG, sustainability and corporate governance matters. The GSC became operational in 2022. The mandate of the GSC, which is available on our website, is responsible reviewing and monitoring ESG-related strategies and performance objectives and targets, including in respect of GHG emissions (including our 2025 and 2035 emissions targets) and other Material ESG Factors. The GSC also closely monitors regulatory developments, emerging and best practices in respect of climate-related issues. The GSC is also responsible for the Company's corporate governance practices, including board composition, board skills and education and nomination and appointment of new directors. In respect of climate-related matters, the GSC is assisted by the Board's Human Resources Committee, in respect of identifying and monitoring performance-based metrics in our compensation plans (which, in our annual bonus scorecard includes emissions and other ESG-related metrics), our Health, Safety & Environment Committee, which monitors our safety, pipeline and asset integrity programs, as well as environmental regulatory compliance. Ultimate responsibility for oversight of climate, ESG and sustainability-related matters remains, however, with the Board. The Board is responsible for stewarding the Company's strategy, and overall business and financial strength, including monitoring climate-related risks and opportunities. This includes, with the assistance of the GSC, oversight of climate-related strategies including carbon reduction targets and initiatives and related risks and opportunities as part of broader corporate strategy, capital allocation, M&A strategy and enterprise risk management oversight responsibilities.
Chief Executive Officer (CEO)	The CEO provides overall leadership and direction to the Company, including in respect of climate and ESG-related matters. The CEO works directly and collaboratively with his Senior Vice President (SVP) team, including the SVP, Sustainability, External Relations & General Counsel, to develop and oversee execution of the Company's ESG strategy and performance objectives and energy transition strategy. Each SVP has responsibilities related to the development of climate-related strategies and initiatives.

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	Scope of board-level oversight	Please explain
Scheduled – all meetings	<ul style="list-style-type: none"> Reviewing and guiding strategy Reviewing and guiding major plans of action Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues 	<Not Applicable>	As part of all of its scheduled meetings, the board reviews the development and ongoing evaluation of Keyera's strategy, including the integration of climate-related and energy transition strategies. The board also approves major capital expenditures, acquisitions and divestitures informed by Keyera's capital allocation framework which includes a greenhouse gas evaluation component. The board is responsible for monitoring progress on emissions reduction, GHG targets and the annual company scorecard. Detailed performance updates are discussed by the appropriate board Committees, which then report to the board. The board meets six times a year and its committees meet quarterly.
Scheduled – some meetings	<ul style="list-style-type: none"> Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives 	<Not Applicable>	Climate-related issues also represent a significant element of the board's strategy session, which is held once a year. Climate-related issues are also integrated into its enterprise risk reviews, which happen annually. Annual budgeting and capital allocation decisions are approved by the board on an annual basis and include consideration of various climate-related matters, including emission reduction initiatives, carbon-related compliance costs and energy transition planning and initiatives.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Keyera uses a skills matrix to assess our board's skills and industry experience and guide board recruitment decisions, and we have criteria specifically related to climate-related issues. Specifically, our matrix has a specific sustainability criterion which is described as, "Experience related to sustainability matters relevant to the energy industry, including emissions, safety, water and land management, diversity, Indigenous engagement, community relations, as well as the development and evaluation of sustainability-based performance metrics." As of March 2022, forty percent of our Board of Directors holds expertise in Sustainability, as demonstrated on page 36 of the 2022 Information Circular: https://www.keyera.com/assets/Attachments/2022-Information-Circular/2022-Information-Circular-25March2022-FINAL.pdf	<Not Applicable>	<Not Applicable>

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)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Chief Financial Officer (CFO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Chief Operating Officer (COO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Other, please specify (Senior Vice-President, Sustainability, External Affairs and General Counsel)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Other C-Suite Officer, please specify (Chief Commercial Officer)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly

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).

Keyera's CEO is accountable for developing Keyera's strategy, including climate-related considerations, and works directly with the board and its committees. The Executive Team (comprised of the CEO and five SVPs) is responsible for assessing and managing climate-related risks and opportunities in their respective areas, and broad strategic oversight and emissions performance and reporting are provided by the SVP, Sustainability, External Affairs and General Counsel. Collectively, the Executive Team is responsible for the development and stewardship of Keyera's approved ESG and climate change strategies. The Executive Team also oversees corporate ESG performance and monitors progress against emissions targets.

Functional leaders below the Executive Team are responsible for identifying, assessing and managing climate-related risks related to their respective areas of business. Information from these leaders is provided to the Executive Team to ensure climate-related issues are identified and managed appropriately.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Since 2020, Keyera has included ESG-aligned performance metrics in our annual incentive (or bonus) program for executives and employees. These safety, environmental and operational performance objectives represent 30 percent of our annual company scorecard and include emissions reduction targets. The emissions component of the bonus program is based on meeting a predetermined annual GHG intensity target that aligns with our multi-year corporate targets of a 25% reduction by 2025 and a 50% reduction by 2035.

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).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Corporate executive team	Monetary reward	Emissions reduction target	Our Annual Bonus Scorecard incorporates key ESG-related performance metrics, including a GHG intensity reduction performance metric. Performance against these metrics, including the GHG reduction metric, is tracked on a quarterly basis and reported to the Committees and the Board. Performance against these metrics, including the GHG reduction metric, is tracked on a quarterly basis and reported to the committees and the board. Annual results are approved by the board and used to determine annual bonuses for our executives and employees.
All employees	Monetary reward	Emissions reduction target	Our Annual Bonus Scorecard incorporates key ESG-related performance metrics, including a GHG intensity reduction performance metric. Performance against these metrics, including the GHG reduction metric, is tracked on a quarterly basis and reported to the committees and the board. Annual results are approved by the board and used to determine annual bonuses for our executives and employees.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	3	
Medium-term	3	10	
Long-term	10	25	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Keyera looks at various factors when evaluating the financial, operational and strategic impact on our business. In 2021, Keyera completed a comprehensive Enterprise Risk Management (“ERM”) review, conducted by a third party. As part of this process, key risk areas were identified that were considered to have a potentially significant impact on our operations, finance or strategy. These areas included Health, Safety and Environment, Reputation, Operations and Financial/Shareholder Return. We assess these categories along two axes 1) likelihood and 2) impact on business. Both continuums are on a defined five-point scale.

With regards to the financial impact scale, Keyera considers risks/activities with implications of greater than \$50 million to be ‘severe’, and those between \$20-\$50 million are considered ‘significant’. From an environmental standpoint, we consider ‘severe’ to be persistent (2+ yrs) and/or widespread adverse effects on fish-bearing / recreational water bodies, human/livestock drinking water sources or sensitive areas. With regards to impact on customers and stakeholder reputation, we consider the number of customers/stakeholders and degree of damage, as well as the extent of attention. Operational examines the impact on our ability to sustain operations/downtime and Culture considers the degree of employee disengagement.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

Keyera has developed a formal enterprise risk management (ERM) process to identify, assess and manage climate-related risks. Led by our Finance team and working with the ERM process, each SVP is responsible to identify and evaluate risks in their respective areas of the business. Working with their business and functional units, and often bringing information from external experts and stakeholders, this evaluation considers financial, operational, reputational and strategic impacts. Climate-related risks are considered within each of these categories. Risks are evaluated in terms of impact to business and likelihood and include consideration of climate-risks, including regulatory impacts, consumer demand and market changes, reputational concerns and access to capital. The risk assessment is completed in an integrated and coordinated manner and subject to a risk matrix with specific criteria which are defined quantitatively on a five-point scale (see C2.1.b). Within the ERM process, each risk is assigned a senior executive responsible for ensuring the risk is monitored and appropriate mitigation strategies are in place. Results are rolled up to the Executive Team, reported to the CEO and CFO, and then reported to the full board. This process is conducted formally on an annual basis; Risks are also reviewed during strategy development and financial planning activities by business functions and at the executive level. The board ultimately has oversight of the ERM process and ensuring regular monitoring and evaluation that these risks, ensuring they are reflected in our overall corporate strategy and ensuring that robust mitigation measures are in place. The board conducts a comprehensive annual risk review, which is increasingly focused on sustainability and climate-related risks.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	An increasing area of climate-related risks relates to the ongoing development, change and costs associated with federal, provincial and local emissions-related regulation, including emissions management and carbon pricing. Changes to Alberta's TIER regulation which could impact equivalency with the federal regulations are an ongoing risk. Regulatory reviews and changes to calculation methodologies affecting compliance obligations are also significant risks. Regulatory frameworks increase direct costs related to compliance, monitoring and reporting. Compliance and reporting costs could impact the costs of providing services to customers. We manage these risks by closely monitoring changes to regulations and routinely assessing the impacts of proposed changes. Keyera includes these regulations in our enterprise and facility/business unit-level risk assessments, as well as in our operational and strategic planning.
Emerging regulation	Relevant, always included	As noted above, federal, provincial and local regulations related to carbon pricing continue to evolve quickly, both in our sector as well as in sectors in our value chain (power, refining, etc.). Keyera carefully monitors developments, legislative initiatives and regulatory trends across Canada and the U.S., as well as international trends. Current and anticipated regulatory frameworks are expected to result in increased operating costs for Keyera, including those related to carbon compliance for certain facilities. As part of our risk analyses, Keyera uses a blended GHG and financial model to forecast the potential financial impacts of different carbon regulations on our current assets and activities. Keyera participates in multiple industry working groups and sessions with regulators to discuss and monitor risks associated with emerging regulations and provide comments to help control unintended consequences that may arise. Regulatory instability and uncertainty also create challenges with accurately forecasting yearly operating costs, resulting in less predictability for our business planning.
Technology	Relevant, sometimes included	Keyera evaluates the risks related to technology from different perspectives. From one perspective, we evaluated how advancements in clean and renewable energy, electrification, and battery storage, as well as general improvements to fuel efficiency, could negatively impact the demand for oil and gas products and Keyera's services. We also evaluated the risks of technology related to our operations and the costs/risks related to transitioning to new technology and energy sources. Keyera must carefully balance possible efficiency gains with facility lifecycle considerations, costs, and possible safety or unforeseen operational impacts related to deploying new technology.
Legal	Relevant, sometimes included	Keyera's activities are regulated by federal, provincial and municipal environmental laws and regulations, which impose restrictions and obligations in connection with facility emissions. As these laws and regulations are evolving quickly, Keyera could be exposed to increased costs and legal liability should we fail to meet our obligations. These laws and obligations are considered within current and future regulatory risk analysis and closely monitored by our Legal and Regulatory teams.
Market	Relevant, always included	There are many macro and micro dynamics impacting the market for oil and gas products, both in the near-term and long-term. Examples of factors that we include in our market risk analyses are volatile commodity product pricing, storage and pipeline capacity, price of power, extreme weather events and consumer preference changes. The above dynamics could also lead producers to curtail supply or customers may be unable to fulfill their supply contracts, which could impact Keyera revenues. Demand erosion and reduced supply could negatively impact our revenues, asset base, and ability to grow. Unstable and unpredictable commodity pricing and market conditions create risk and uncertainty in our marketing strategies and financial planning. Fundamental changes to the way commodities are priced could impact our liquid blending and iso-octane margins.
Reputation	Relevant, always included	As negative sentiment towards the energy industry continues to grow, Keyera and other energy industry players (including Keyera customers, partners and suppliers) could face reputational challenges, including opposition to existing or new projects. Some of these risks include increased regulatory costs, decreased access to capital, increased cost of capital, decreased consumer demand, decreased product availability and changing commodity prices. Additional risks could include increased social activism, as well as stakeholder or community resistance to Keyera projects or activities in general. Some insurers have stated publicly that they will no longer provide new insurance capacity or are reducing the current capacity offered to companies operating in the oil sands. The result of these challenges is the impact on our ability to conduct our operations, increased costs, disrupted timelines and resourcing.
Acute physical	Relevant, sometimes included	Our facilities can be impacted by acute weather events or chronic physical changes. The weather may also affect our operations and projects, as well as those of our customers and suppliers. Weather events, extreme heat, and extreme cold could pose safety concerns for workers, could affect the performance and operation of Keyera's facilities, project delays, or could cause facility outages or interruptions to transportation from suppliers or to market.
Chronic physical	Relevant, sometimes included	Changes in the global temperatures and weather variability could have an impact on the demand for our products. For example, warmer temperatures could impact the demand for propane. Volatile temperatures could also lead to volatile commodity pricing, which could have both positive and negative impacts on our marketing division, as well as on the activities of our customers. Prolonged droughts could impact Keyera's ability to access water for our operations.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Carbon pricing mechanisms
--------------------	---------------------------

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Keyera is obligated to comply with GHG compliance under Alberta's Technology Innovation and Emissions Reduction (TIER) Regulations for its Large Final Emitters (LFEs) and Aggregate Facilities.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

4000000

Potential financial impact figure – maximum (currency)

6500000

Explanation of financial impact figure

Under TIER, the cost per tonne was \$40 for the 2021 operating year. The majority of Keyera's facilities are based in Alberta and are regulated under TIER. The range is based on current carbon costs paid at the current carbon price, and that of the future projected carbon price in 3 years. LFEs and Aggregate facilities are assigned a benchmark which may be subjected to increased stringency.

Cost of response to risk

4000000

Description of response and explanation of cost calculation

Keyera has invested in technology and operational efficiencies to reduce the cost of compliance. The financial cost to respond to the risk provided is an estimation of cost for some of the technologies Keyera has or plans to implement in the short-term, including optimization efforts both at the Gas and Processing, and Liquids Infrastructure business units, where we have consolidated or redirected plants in order to operate more efficiently and near full capacity; thereby reducing GHG emissions intensity.

Comment

The cost of response to risk is approximate, considered to be between \$3-5 million.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Enhanced emissions-reporting obligations
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Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Current regulations impose associated compliance costs due to increased administrative burden and reporting requirements. In addition, there has been an increase in requirements related to methane emissions surveys in accordance with Directive 60. This has also increased the administrative burden to schedule and conduct surveys, data management and reporting costs for Keyera and its facilities.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

300000

Potential financial impact figure – maximum (currency)

600000

Explanation of financial impact figure

The financial figure includes the employee and consultant costs related to regulatory GHG emissions reporting to government bodies, as it relates to GHG and methane regulations. For the methane reporting, the burden is expected to be low although there could be an indirect financial impact relating to the development of our facilities.

Cost of response to risk

200000

Description of response and explanation of cost calculation

In an effort to manage the cost of reporting, Keyera has moved to a centralized data management model at a cost of approximately \$200,000 annually.

Comment

An increase in top-end estimates over last year is due to increasing costs associated with data management, updating systems and reporting obligations.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms
---------------------	---------------------------

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Current and anticipated regulatory frameworks are expected to result in increased direct costs related to compliance obligations. In April 2022, the price per tonne of CO2 equivalent will be \$50. This price will increase by \$15 annually until it reaches \$170 in 2030.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

100000000

Explanation of financial impact figure

Federal carbon pricing is scheduled to increase to \$50/t in 2022, and to \$170/t by 2030. A legislative change could impact these values and the associated compliance costs.

Cost of response to risk

600000

Description of response and explanation of cost calculation

Keyera has several employees working on monitoring the risk of emerging regulations, including people from Sustainability, Corporate Development, Business Development and External Relations.

Comment

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) 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

Use of new technologies

Primary potential financial impact

Reduced direct costs

Company-specific description

Keyera is piloting new technology to improve how we identify and repair methane and other gas leaks. This technology, the first continuous monitoring program to be approved for regulatory use, uses calibrated sensors and artificial intelligence to monitor and alert Keyera of leaks as soon as they occur. This allows us to respond faster in eliminating fugitive emissions and can reduce costs associated with ground-level monitoring.

Time horizon

Short-term

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)

<Not Applicable>

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

125000

Explanation of financial impact figure

We estimated that we can reduce our fugitive surveys by 50% should we implement this technology at all facilities, and as such reduce associated compliance costs. The additional benefit would be to potentially detect and repair large leaks much sooner than waiting for ground surveys.

Cost to realize opportunity

50000

Strategy to realize opportunity and explanation of cost calculation

Keyera is piloting this new technology at one facility and the costs for this pilot are \$50,000 for the initial facility when including one year of monitoring. The cost to realize the opportunity at all relevant sites is \$550,000 and includes equipment costs, as well as monitoring costs for one year.

Comment

If successful, Keyera could expand the use of this technology to other facilities to supplement the existing fugitive emissions management plan and improve the response time to address larger leaks.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Markets

Primary climate-related opportunity driver

Use of public-sector incentives

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

Keyera participates in Alberta's Emissions Performance Credits (EPCs) system associated with the Technology Innovation and Emissions Reduction (TIER) Regulation. In this system, Keyera is able to generate credits when we are under the facility benchmark.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

4500000

Potential financial impact figure – maximum (currency)

4800000

Explanation of financial impact figure

Keyera applied for Emission Performance Credits (EPC) in 2021. These EPCs can be used to reduce compliance costs in future years. Assuming that we receive all the EPCs we applied for in 2021 and that the carbon price continues to be greater than \$40/tonne, we estimate that the financial impact would be between \$4.5 MM and \$ 4.8MM.

Cost to realize opportunity

250000

Strategy to realize opportunity and explanation of cost calculation

Keyera has staff and consultants that manages applications for EPCs. This is an estimate of the cost of those salaries which includes time for review and QA/QC of work.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

Keyera has entered into agreements to purchase solar power. Through these partnerships, Keyera accesses renewable electricity generation that lowers the emissions intensity of the electricity used for our operations. Keyera retains the carbon emission offsets to manage compliance obligations.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

2300000

Potential financial impact figure – maximum (currency)

17500000

Explanation of financial impact figure

Keyera takes the fixed price risk on electricity and offsets to facilitate the development of the solar facility. Keyera's financial results are a function of how the two floating indexes (electricity & offsets) settle over the contract.

Cost to realize opportunity

25000

Strategy to realize opportunity and explanation of cost calculation

The costs to realize this opportunity represents the cost related to the commercial negotiation with the renewable energy provider, primarily salaries and consultant fees.

Comment

When the facility begins commercial operation in mid-2022, Keyera will be the sole purchaser of the renewable electricity produced. The forecasted 53,000 MWhs of power produced is equivalent to about 10% of Keyera's total annual consumption – enough to power about 4,000 houses annually. The benefits for Keyera include contracted fixed electricity pricing for 15 years; more than 28,000 tonnes of annual carbon emission offsets that will be applied to lower the carbon intensity of Keyera's assets .

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a transition plan within two years

Publicly available transition plan

<Not Applicable>

Mechanism by which feedback is collected from shareholders on your transition plan

<Not Applicable>

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

Attach any relevant documents which detail your transition plan (optional)

<Not Applicable>

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future

Keyera has an energy transition strategy though it does not yet align with a 1.5C world. Our energy transition strategy includes a near-term and long-term GHG target of reducing GHG emissions intensity by 25% by 2025 and 50% by 2035 from a 2019 baseline. To achieve this we have developed a parallel path strategy of 1) decarbonizing our base operations and 2) pursuing energy transition opportunities. We will continue to explore opportunities, evaluate the economics, and build our understanding of the scope 3 emissions associated with our value chains. This work will guide potential future target-setting initiatives, including a 1.5°C aligned strategy. We are also closely monitoring guidance from the Science Based Targets initiative (SBTi) to help inform our understanding and progress going forward.

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	No, but we anticipate using qualitative and/or quantitative analysis in the next two years	Other, please specify (Resources spent responding to changes in regulation)	Alberta and Canada have undergone tremendous changes to their emissions regulations, monitoring and reporting requirements in the last few years, and as such, Keyera's emissions and operations teams have been focusing on building expertise in those areas. We recognize that there is significant value in conducting a scenario analysis, not only to inform our own business strategy, but also to provide further disclosure to our stakeholders. To address these issues, we have taken initial steps to build internal capacity, engage with external experts and establish the knowledge foundations required to do an appropriate and meaningful analysis. Examples of our capacity building include conducting a review of enterprise risks with an external consultant and a comprehensive process to identify Keyera's material ESG factors. In addition, through the development of our GHG targets and 2021 Climate Report, significant work was conducted to understand different pathways, scenarios and their financial and emission impacts. We have significantly evolved our GHG/financial modelling as well as increased engagement with different parts of the business to understand the impacts of regulatory risks, application of technology and other climate-related considerations. These activities will help our corporate understanding as we undertake a comprehensive scenario analysis.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	One of the paths of our energy transition strategy includes identifying and evaluating future-forward solutions, low-carbon service opportunities and new business models that leverage our existing asset base, core competencies, and strong customer relationships. We are exploring low-carbon products, services and transportation solutions that respond to our customers' needs to reduce emissions in their products and their value chain. As a midstream company, Keyera can offer low-carbon services to our customers at multiple stages of the value chain. Examples include potential CCUS services for customers, biofuel and associated transportation, hydrogen storage and transportation.
Supply chain and/or value chain	Yes	Keyera's energy transition strategy is enabled by partnerships along our value chain. This includes those supplying us with product, as well as our power providers. Keyera accesses renewable electricity generation which lowers our emissions intensity and compliance costs. This helps support the development of renewable energy in Alberta while also reducing the emissions used for our operations. One significant example of the execution of this strategy is Keyera's 15-year Power Purchase Agreement to support a partnership, in which a 25 MW capacity solar generation facility will be developed in Alberta. On the supplier front, Keyera engages with some of our suppliers of product to explore opportunities to reduce the emissions associated with their product.
Investment in R&D	Yes	Keyera is actively looking for opportunities to apply new technology and we have been researching and evaluating new commercially viable technology that can help us decarbonize our base business and reduce the risks related to regulatory requirements and compliance costs. We have partnered with technology providers to pilot new emission-reducing technology at Keyera facilities. Keyera has established an Innovation Team and their role is to further develop Keyera's long-term strategy around innovation which includes the research, evaluation and application of new technology in our base operations, including technologies that help reduce our emissions.
Operations	Yes	Our energy transition strategy includes a focus on decarbonizing base business operations. We are focused on reducing emissions in our current operations by 1) investing in technology during upgrades or new projects; 2) pursuing strategies to maximize utilization; 3) enabling the use of renewables in our value chain; and 4) supporting carbon capture, utilization and storage (CCUS). At an asset level, emissions at each of Keyera's major facilities are estimated on a quarterly basis and reviewed by the asset team and senior management against annual targets. We also conduct GHG and financial models to anticipate future emissions and compliance costs, as well as to help us evaluate projects. These considerations are incorporated into our capital allocation process, budgeting and decision making. Climate change considerations have influenced decisions with respect to equipment selection and modifications at several Keyera facilities, as well as the adoption of operational controls. These efficiencies not only reduced emissions intensity, but facilities are also able to process products and maximize capacity more efficiently.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets	Keyera uses a comprehensive capital investment framework to ensure our investments and activities are aligned with our commitment to deliver disciplined growth, financial stability, and long-term value for our shareholders. This framework ensures we remain focused on the core elements of our strategy, properly evaluate financial impact and risk, and align with our ESG priorities, particularly emissions reductions and energy transition opportunities. Investments, acquisitions, divestitures and major projects/products/service offerings undergo a comprehensive screening process against the framework. The framework allows us to evaluate risks and trade-offs, understand overarching financial impacts on our business and balance materiality with the ability to fund. Top opportunities move to our stage-gate process of project development. We monitor opportunities at each gate and/or quarterly to ensure they continue to meet the initial criteria. REVENUE There are products and services (such as providing customers with products that enable more efficient, lower carbon-intensity production) that have contributed to revenues, and we expect to grow this segment of our business. For example, we are exploring new low-carbon products and services, such as lower carbon fuels, hydrogen, solvents and CCUS services. We anticipate that revenues from these lower-carbon products and services will increase within the 1-3 years. DIRECT COSTS As climate-related regulatory obligations have increased, Keyera has experienced increased costs of carbon compliance, which is a direct cost to our business. Keyera has also had to invest in tracking systems and resources to manage these increased demands. These costs are evaluated throughout our operations and business planning and are factored into operational budgeting and financial planning. As a case study, Keyera anticipates GHG compliance costs under Alberta's Technology Innovation and Emissions Reduction (TIER) Regulations for Large Final Emitters (LFEs) and Aggregate Facility. These costs have an impact on our bottom line and/or impact the cost to our customers. We plan for and consider these costs as we conduct financial planning for our business, as well as plans (upgrades, optimization) for individual facilities. INDIRECT COSTS Power is a large component of our operating costs and emissions, and as Alberta transitions its energy mix (eliminating coal) and new renewable power and storage technologies become available, we anticipate changes to the price of power. These indirect costs (plus the opportunity for emissions reductions) continue to influence our decisions, for example, exploring the use of cleaner-burning fuels, reusing waste heat and generating our own electricity at some of our facilities, including co-generation and solar. These indirect costs influence our financial modelling, asset planning and budgeting. CAPITAL EXPENDITURES Climate has influenced capital expenditures as we have invested capital to support emissions reduction opportunities, such as equipment upgrades and the application of new technology, such as new burners at our facilities. We have also invested or are exploring investing capital in stand-alone emissions mitigation projects such as co-generation or CCUS capabilities. ACQUISITIONS & DIVESTMENTS Climate-related factors have influenced our acquisitions and divestments strategies and are included in our economic evaluations and consideration of new investments, partnerships or divestitures. One case study is our Gathering & Processing Optimization Plan which entailed consolidating (decommissioning) our facilities and redirecting gas to our most efficient facilities. Through this program, 6 plants will be taken offline. By consolidating, we not only reduce the per-unit operating cost but also reduce our overall CO2 emissions. We continue to explore further network and emission optimization opportunities in this part of our business. ACCESS TO CAPITAL While access to capital has not yet been impacted at this point, Keyera is closely monitoring this risk. We anticipate it will be an increasing factor of consideration in medium and long-term financial planning. We are making efforts to mitigate these risks through a focus on GHG reduction, increase disclosure and engagement with investors, climate change risk management strategies and putting further resources towards exploring low-emissions opportunities. ASSETS Keyera monitors the emissions and GHG costs of our assets, including compliance costs. This is incorporated into our maintenance and budgeting planning of our specific assets and as part of our overall asset portfolio.

C4. Targets and performance

C4.1

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

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Intensity metric

Other, please specify (tCO₂e/m³OE)

Base year

2019

Intensity figure in base year for Scope 1 (metric tons CO₂e per unit of activity)

0.04

Intensity figure in base year for Scope 2 (metric tons CO₂e per unit of activity)

0.012

Intensity figure in base year for Scope 3 (metric tons CO₂e per unit of activity)

<Not Applicable>

Intensity figure in base year for all selected Scopes (metric tons CO₂e per unit of activity)

0.052

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure

<Not Applicable>

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2025

Targeted reduction from base year (%)

25

Intensity figure in target year for all selected Scopes (metric tons CO₂e per unit of activity) [auto-calculated]

0.039

% change anticipated in absolute Scope 1+2 emissions

10.9

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year for Scope 1 (metric tons CO₂e per unit of activity)

0.038

Intensity figure in reporting year for Scope 2 (metric tons CO₂e per unit of activity)

0.006

Intensity figure in reporting year for Scope 3 (metric tons CO₂e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for all selected Scopes (metric tons CO₂e per unit of activity)

0.0443

% of target achieved relative to base year [auto-calculated]

59.2307692307692

Target status in reporting year

New

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

Target ambition

<Not Applicable>

Please explain target coverage and identify any exclusions

The target includes emissions from all facilities and operations within the financial (equity) control of Keyera.

Plan for achieving target, and progress made to the end of the reporting year

Keyera has an energy transition strategy which includes two parallel paths 1) decarbonizing our operations and 2) pursuing energy transition opportunities. With regards to decarbonizing our operations which will directly contribute to our GHG Target we are pursuing: 1) Investing in technology and operational efficiency – Keyera continues to evaluate opportunities to improve operational efficiency at its operating facilities, such as: - upgrades, retrofits and digitization - exploring additional cogeneration including

the prospect of self-power generation opportunities where the resulting emissions would be lower than the equivalent of purchasing electricity from the Alberta power grid - choosing low-carbon alternatives during new project development 2) Optimizing utilization of our facilities by consolidating volumes, and selectively divesting from high-carbon intensity assets. For example, our Gathering & Processing optimization which saw the consolidation of several large gas processing facilities, and the redirection of production to other underutilized sites. 3) Supporting renewables and low carbon power. For example, construction on the Michichi solar power project which is anticipated to come online towards the end of 2022 is anticipated to supply up to 10% of Keyera's power needs. 4) Exploring carbon capture, utilization, and storage (CCUS) to reduce emissions from our facilities.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

Target reference number

Int 2

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Intensity metric

Other, please specify (tCO₂e/m³OE)

Base year

2019

Intensity figure in base year for Scope 1 (metric tons CO₂e per unit of activity)

0.04

Intensity figure in base year for Scope 2 (metric tons CO₂e per unit of activity)

0.012

Intensity figure in base year for Scope 3 (metric tons CO₂e per unit of activity)

<Not Applicable>

Intensity figure in base year for all selected Scopes (metric tons CO₂e per unit of activity)

0.052

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure

<Not Applicable>

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2035

Targeted reduction from base year (%)

50

Intensity figure in target year for all selected Scopes (metric tons CO₂e per unit of activity) [auto-calculated]

0.026

% change anticipated in absolute Scope 1+2 emissions

15.6

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year for Scope 1 (metric tons CO₂e per unit of activity)

0.038

Intensity figure in reporting year for Scope 2 (metric tons CO₂e per unit of activity)

0.006

Intensity figure in reporting year for Scope 3 (metric tons CO₂e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for all selected Scopes (metric tons CO₂e per unit of activity)

0.0443

% of target achieved relative to base year [auto-calculated]

29.6153846153846

Target status in reporting year

New

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

Target ambition

<Not Applicable>

Please explain target coverage and identify any exclusions

The target includes emissions from all facilities and operations within the financial (equity) control of Keyera.

Plan for achieving target, and progress made to the end of the reporting year

Keyera has an energy transition strategy which includes two parallel paths 1) decarbonizing our operations and 2) pursuing energy transition opportunities. With regards to decarbonizing our operations which will directly contribute to our GHG Target we are pursuing: 1) Investing in technology and operational efficiency – Keyera continues to evaluate opportunities to improve operational efficiency at its operating facilities, such as: - upgrades, retrofits and digitization - exploring additional cogeneration including the prospect of self-power generation opportunities where the resulting emissions would be lower than the equivalent of purchasing electricity from the Alberta power grid - choosing low-carbon alternatives during new project development 2) Optimizing utilization of our facilities by consolidating volumes, and selectively divesting from high-carbon intensity assets. For example, our Gathering & Processing optimization which saw the consolidation of several large gas processing facilities, and the redirection of production to other underutilized sites. 3) Supporting renewables and low carbon power. For example, construction on the Michichi solar power project which is anticipated to come online towards the end of 2022 is anticipated to supply up to 10% of Keyera’s power needs. 4) Exploring carbon capture, utilization, and storage (CCUS) to reduce emissions from our facilities.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

No other climate-related targets

C-OG4.2d

(C-OG4.2d) Indicate which targets reported in C4.1a/b incorporate methane emissions, or if you do not have a methane-specific emissions reduction target for your oil and gas activities, please explain why not and forecast how your methane emissions will change over the next five years.

Methane emissions are fully incorporated in our corporate intensity-based targets outlined in C4.1b.

The emissions are represented in the numerator emissions figure and include venting emissions from compressor seals, pneumatic equipment, fugitive emissions, tank venting, and other venting sources such as analyzer vents.

For the reporting year, methane emissions accounted for approximately 5.7% of total corporate GHG emissions.

Keyera maintains active abatement programs through the year to ensure that methane emissions are managed effectively and reduced/eliminated where practical.

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	5	344607
To be implemented*	3	3948
Implementation commenced*	4	57062
Implemented*	5	61522
Not to be implemented	3	160667

C4.3b

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

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

7045

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

285800

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

75000

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Turbo dry-out line project

Initiative category & Initiative type

Fugitive emissions reductions	Oil/natural gas methane leak capture/prevention
-------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

1341

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

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

54000

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

23000

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

High to low bleed pneumatic device retrofit project.

Initiative category & Initiative type

Fugitive emissions reductions	Oil/natural gas methane leak capture/prevention
-------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

136

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

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

3100

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

23000

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

Instrument Air conversion at a compressor station

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

30000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1
Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1200000

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

340000

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Gas plant shut down and re-direct

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

23000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1
Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

920000

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

1920000

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

Gas plant shut down and redirect

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Keyera has costs related to compliance with emission-related regulatory requirements and standards. Investing in emission reduction initiatives helps us to reduce those compliance costs.
Dedicated budget for energy efficiency	Operations and Project Management have budgets associated with exploring and implementing initiatives which would promote energy efficiency in our operations and business.
Financial optimization calculations	The financial impact of compliance costs and costs associated with physical and transitional risks are considered when evaluating whether to invest in lower emitting technology, projects or service offerings. We use a capital investment framework, which includes the quantification of emissions, as a tool to evaluate acquisition, divestiture and major projects.
Internal price on carbon	Carbon price is presented as part of decisions/business cases/cost-benefit on technology selection, project management, new investments/divestitures. We use the federal carbon pricing system. Our internal price on carbon contributes to the evaluation of cost/benefit of emission reduction activities.
Internal incentives/recognition programs	We have an annual bonus which incorporates ESG-related metrics, including a GHG intensity reduction performance metrics.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

No

C-OG4.6

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

Keyera maintains an active fugitive emission management program (FEMP) which targets emissions from equipment leaks and venting sources. Under this program, Keyera conducts ground-based optical gas imaging surveys three times per year on all sweet gas processing facilities and compressor stations, as well as at sites which have tanks controlled with a vapour recovery unit (VRU) to ensure seals are working as expected. Surveys are also conducted annually on all sour gas facilities in addition to the routine gas monitoring conducted for safety purposes. Annual surveys are also conducted at fractionation facilities and terminals to ensure volatile organic compound (VOC) emissions are controlled. Any leaks identified are tracked, and an effort is made to repair these within 30 days of discovery.

In addition to the FEMP, compressor seals for all units which vent to the atmosphere are measured annually to ensure that the seals not venting excessively and that the fleet-wide average adheres to regulatory requirements. The tracking and reporting of venting from these sources were improved in 2021 through the implementation of reporting software which will ensure improved accuracy of reporting of these sources into government programs and corporate reports.

Case study: In 2021, a campaign was conducted to identify and document all natural gas powered pneumatic devices used throughout Keyera's operations. This campaign identified several devices which were deemed to be high bleed devices which were subsequently retrofit to low bleed devices. In 2021, one facility was converted entirely to instrument air eliminating emissions, and another was completely retrofit to use low bleed devices. The majority of Keyera's facilities use instrument air, and thus venting from pneumatic devices is minimal.

C-OG4.7

(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.

Keyera has a Leak Detection and Repair (LDAR) program in place which meets the requirements of the Alberta Energy Regulator (AER) and Environment Canada Climate Canada (ECCC). Ground-based optical gas imaging surveys are used as part of our LDAR program with a frequency of once per year at our sour gas processing facilities, compressor stations, and chemical facilities, and three times per year at sweet field batteries, compressor stations, and gas plants. All survey frequencies were increased to meet the new AER and ECCC requirements in 2021 and incorporated into Keyera's Fugitive Emissions Management Program (FEMP). The majority of Keyera's assets are included in this program which includes all gas processing facilities, compressor stations, injection facilities, pipelines, fractionation facilities, chemical facilities, terminals, and custom treating facilities. Leaks identified are tracked using an online system and repaired within 30 days of discovery where practical. If extensive repairs are required, these are tracked internally to ensure they are addressed during facility shut-down periods and turn-arounds.

Case study: Throughout 2021, Keyera evaluated and implemented some new technology to help manage methane emissions from several sites. This pilot includes fence-line monitoring of methane and volatile organic compounds (VOC) emissions at one gas processing facility, as well as collaboration with an area alternative FEMP program which utilizes aerial-based monitoring to warn of potential new emission sources. Through these pilots, we become aware of new potential sources faster and can investigate and repair leaks sooner.

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.

Keyera's gas processing facilities sometimes experience flaring as part of their operations to release pressure.

Keyera aims to keep flaring volumes less than 0.5% of total inlet volumes within any given year. In 2021, Keyera maintained this level at 0.07% across all operated facilities.

As part of meeting this target, we evaluate our operating practices and apply learnings from flaring events. When an incident occurs, operational teams use a flaring decision tree to assess whether flaring is required. We conduct annual reviews of the flaring decision tree to identify opportunities to reduce flaring. In 2021, Keyera assessed a number of flaring reduction opportunities in major gas plants.

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

Name of organization(s) acquired, divested from, or merged with

<Not Applicable>

Details of structural change(s), including completion dates

<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

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

Scope 1

Base year start

January 1 2005

Base year end

December 31 2005

Base year emissions (metric tons CO2e)

1151054

Comment

Scope 2 (location-based)

Base year start

January 1 2005

Base year end

December 31 2005

Base year emissions (metric tons CO2e)

161129

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 6: Business travel

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

N/A

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate 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)
Other, please specify (Alberta greenhouse gas quantification methodologies. Version 2.2)

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

1492388

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

This number includes Canadian and US business units.

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 operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment

Scope 2 grid factors are taken from Canada's National Inventory Report and represent the most up-to-date factor available during the reporting year.

C6.3

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

Reporting year

Scope 2, location-based

270536.63

Scope 2, market-based (if applicable)

<Not Applicable>

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

This number includes Canadian and US business units.

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?

No

C6.5

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

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Keyera uses purchased goods in its facility construction and operation, however the emissions from these goods are not accounted for, or not available.

Capital goods

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Keyera does not use capital goods in producing our products. We consider unrefined supply to be captured in the 'upstream transportation and distribution' category.

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

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Within this category, upstream emissions of purchased fuels and upstream emissions of purchase electricity are already accounted for in our scope 1 and scope 2 reporting.

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Waste generated in operations**Evaluation status**

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Keyera currently tracks and reports waste volumes for regulatory requirement. Upon analysis of this data, we determined that the scope 3 emissions from waste is not material to our business.

Business travel**Evaluation status**

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

58

Emissions calculation methodology

Other, please specify (GHG Protocol methodology)

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

0

Please explain

Business travel was down in 2021 due to the impact of COVID-19, and the increased uptake of online meetings.

Employee commuting**Evaluation status**

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1460

Emissions calculation methodology

Other, please specify (internal employee commuter survey)

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

0

Please explain

Emissions from commuting was not estimated to be significantly different from the previous year due to COVID-19, as field-related activities were not as heavily impacted by COVID.

Upstream leased assets**Evaluation status**

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Keyera has very few upstream leased assets and these emissions is not material to our business or GHG management efforts.

Downstream transportation and distribution**Evaluation status**

Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Processing of sold products

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Use of sold products

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

The emissions related to the use of Keyera products would be captured within the 'use of sold products' category as Keyera. Therefore, emissions associated this category are zero (0) and deemed not relevant.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Keyera does not lease downstream assets.

Franchises

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Keyera does not have any franchises.

Investments

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Tracking of emissions related to investments is not core to our business.

Other (upstream)

Evaluation status

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Other (downstream)

Evaluation status

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

C6.7

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

No

C6.10

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

Intensity figure

0.000354

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

1762924

Metric denominator

unit total revenue

Metric denominator: Unit total

4984906000

Scope 2 figure used

Location-based

% change from previous year

41.3

Direction of change

Decreased

Reason for change

The Scope 1 and 2 emissions decreased mainly due to the completion of the Gathering and Processing optimization. This was coupled with significantly improved revenue due to higher overall commodity pricing and income from service contracts.

Intensity figure

0.001844

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

1762924

Metric denominator

Other, please specify (EBITDA)

Metric denominator: Unit total

955848000

Scope 2 figure used

Location-based

% change from previous year

11.2

Direction of change

Decreased

Reason for change

The Scope 1 and 2 emissions decreased mainly due to the completion of the Gathering and Processing optimization. This was coupled with improved earnings through higher commodity pricing and service contracts.

Intensity figure

0.089

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

1762924

Metric denominator

Other, please specify (m3OE (Oil Equivalent))

Metric denominator: Unit total

19810581

Scope 2 figure used

Location-based

% change from previous year

10.53

Direction of change

Decreased

Reason for change

It is the first year we are reporting this metric. This intensity is related to our operational boundary, with the denominator based on corporate dispositions. This excludes pipeline volumes.

Intensity figure

0.0449

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

1762924

Metric denominator

Other, please specify (m3OE (Oil Equivalent))

Metric denominator: Unit total

39288616.29

Scope 2 figure used

Location-based

% change from previous year

13.47

Direction of change

Decreased

Reason for change

It is the first year we are reporting this metric. This intensity is based on our operational boundary, with the denominator based on facility throughput.

C-OG6.12

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

Unit of hydrocarbon category (denominator)

Other, please specify (m3OE (Oil Equivalent))

Metric tons CO2e from hydrocarbon category per unit specified

0.08

% change from previous year

9

Direction of change

Decreased

Reason for change

There was a decrease in emissions related to the Gathering and Processing optimization coupled with an increase in corporate production. There was also the commencement of the Wildhorse Terminal in the U.S.

Comment

This figure includes all Keyera Canadian and US business units.

Unit of hydrocarbon category (denominator)

Other, please specify (m3OE (Oil Equivalent))

Metric tons CO2e from hydrocarbon category per unit specified

0.07

% change from previous year

8

Direction of change

Decreased

Reason for change

There was a decrease in emissions related to the Gathering and Processing optimization coupled with an increase in corporate production.

Comment

This metric is for Keyera Canadian Midstream business.

Unit of hydrocarbon category (denominator)

Other, please specify (Metric Tonnes (Oil Equivalent))

Metric tons CO2e from hydrocarbon category per unit specified

0.65

% change from previous year

12

Direction of change

Decreased

Reason for change

Debottlenecking efforts at the plant resulted in a significant increase in production.

Comment

This metric includes Keyera Chemical Production at the Alberta Envirofuels facility.

C-OG6.13

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

Oil and gas business division

Midstream
Chemicals

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

0.054

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

0.025

Comment

This metric includes all Keyera Canadian and US business units.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	1385715.37	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	85523.63	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	21148.65	IPCC Fourth Assessment Report (AR4 - 100 year)

C-OG7.1b

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

Emissions category

Combustion (excluding flaring)

Value chain

Midstream

Other (please specify) (Chemical Production)

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

1240445.31

Gross Scope 1 methane emissions (metric tons CH4)

1538.82

Total gross Scope 1 emissions (metric tons CO2e)

1299307.82

Comment

Metrics include all Keyera Canadian and US business units.

Emissions category

Flaring

Value chain

Midstream

Other (please specify) (Chemical Production)

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

75115.31

Gross Scope 1 methane emissions (metric tons CH4)

303.9

Total gross Scope 1 emissions (metric tons CO2e)

83469.35

Comment

Metrics include all Keyera Canadian and US business units.

Emissions category

Venting

Value chain

Midstream

Other (please specify) (Chemical Production)

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

69152.42

Gross Scope 1 methane emissions (metric tons CH4)

683.19

Total gross Scope 1 emissions (metric tons CO2e)

86232.26

Comment

Metrics include all Keyera Canadian and US business units.

Emissions category

Fugitives

Value chain

Midstream

Other (please specify) (Chemical Production)

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

317.42

Gross Scope 1 methane emissions (metric tons CH4)

895.02

Total gross Scope 1 emissions (metric tons CO2e)

22693

Comment

Metrics include all Keyera Canadian and US business units.

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	1492273.38
United States of America	114

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Keyera Canada Midstream Operations	1178808.3
Keyera Alberta EnviroFuels Facility (Chemical Production)	313465.08
Keyera USA	114.25

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

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

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions, metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)		<Not Applicable>	
Oil and gas production activities (midstream)	1492273.38	<Not Applicable>	Includes all Keyera Canadian and US business units. This metric also includes Alberta Envirofuels which is a chemical production facility. Net Scope 1 emissions include the net emissions from all Keyera-operated facilities; it does not include facilities in which Keyera has an equity interest or are not operated by Keyera.
Oil and gas production activities (downstream)		<Not Applicable>	N/A
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Canada	268839.91	
United States of America	1696.72	

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 (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Keyera Canada Midstream Operations	208947.54	
Keyera Alberta EnviroFuels Facility (Chemical Production)	59892.37	
Keyera USA	1696.72	

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
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)			
Oil and gas production activities (midstream)	270536.63		This number includes all Keyera Canadian and US business units. This metric also includes Alberta Envirofuels facility which has chemical production activities.
Oil and gas production activities (downstream)			N/A
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

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 CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<Not Applicable>		
Other emissions reduction activities	51227	Decreased	2.824	The full realization of emissions reductions from the facility consolidation efforts which took place over the previous two years.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

C7.9b

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

Location-based

C8. Energy

C8.1

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

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

C8.2

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

	Indicate whether your organization undertook this energy-related activity in the reporting year
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 (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)		7804120.28	7804120.28
Consumption of purchased or acquired electricity	<Not Applicable>		405960.12	405960.12
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>		<Not Applicable>	
Total energy consumption	<Not Applicable>		8210080.4	8210080.4

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

C8.2c

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

Sustainable biomass

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Other biomass

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Coal

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Oil

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Gas

Heating value
HHV

Total fuel MWh consumed by the organization
7799740.65

MWh fuel consumed for self-generation of electricity
942689.44

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Due to the nature of our facilities, it is not possible to split up the amount of fuel used to generate heat and steam to drive facility processes. The amount of natural gas fuel consumed does not include purchased gas from utilities for use in heating offices at both Keyera Canada and the US.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
4379.6

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Includes on-site diesel, propane, and gasoline usage for all Keyera Canada and US business units.

Total fuel

Heating value
HHV

Total fuel MWh consumed by the organization
7804120

MWh fuel consumed for self-generation of electricity
942689.44

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

C8.2d

(C8.2d) 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	249785.47	249125.66		
Heat				
Steam				
Cooling				

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

Canada

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

United States of America

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

C9. Additional metrics

C9.1

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

C-OG9.3e

(C-OG9.3e) Please disclose your chemicals production in the reporting year in thousand metric tons.

Product	Production, Thousand metric tons	Capacity, Thousand metric tons
High value chemicals (Steam cracking)	566.3	551

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	Keyera routinely evaluates opportunities to invest in or deploy emissions reduction technology and low-carbon products and services at its facilities.

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

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Infrastructure	Small scale commercial deployment	≤20%		
Smart systems	Small scale commercial deployment	≤20%		
Carbon capture and storage/utilisation	Small scale commercial deployment	≤20%		
Hydrogen	Small scale commercial deployment	≤20%		
Methane detection and reduction	Small scale commercial deployment	≤20%		
Other energy efficiency measures in the oil and gas value chain	Small scale commercial deployment	≤20%		

C-OG9.8

(C-OG9.8) Is your organization involved in the sequestration of CO2?

Yes

C-OG9.8a

(C-OG9.8a) Provide, in metric tons CO2, gross masses of CO2 transferred in and out of the reporting organization (as defined by the consolidation basis).

	CO2 transferred – reporting year (metric tons CO2)
CO2 transferred in	0
CO2 transferred out	0

C-OG9.8b

(C-OG9.8b) Provide gross masses of CO2 injected and stored for the purposes of CCS during the reporting year according to the injection and storage pathway.

Injection and storage pathway	Injected CO2 (metric tons CO2)	Percentage of injected CO2 intended for long-term (>100 year) storage	Year in which injection began	Cumulative CO2 injected and stored (metric tons CO2)
Acid gas injection (CO2 and H2S co-injected into a production reservoir)	76163.82	100	1996	1154422.12

C-OG9.8c

(C-OG9.8c) Provide clarification on any other relevant information pertaining to your activities related to transfer and sequestration of CO2.

Current Keyera activities involve the injection of acid gas (H2S) and CO2 removed from gas production streams at processing facilities, and injected underground for permanent sequestration. Keyera is evaluating other carbon capture and sequestration opportunities at its facilities.

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 emissions, and attach the relevant statements.

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

05_Statement_of_Verification_Keyera Strachan GP 2021.pdf

05_2021_Keyera Rimbey Gas Plant SOV.pdf

05_12574258-RPT-2-2021 KAEF Statement of Verification.pdf

05_12574261-RPT-02-Keyera Fort Saskatchewan 2021 Statement of Verification.pdf

05_2021_Keyera Aggregate Facility_SOV.pdf

Page/ section reference

All document

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

88

C10.1b

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

Scope 2 approach

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

05_Statement_of_Verification_Keyera Strachan GP 2021.pdf

05_2021_Keyera Rimbey Gas Plant SOV.pdf

05_12574258-RPT-2-2021 KAEF Statement of Verification.pdf

05_12574261-RPT-02-Keyera Fort Saskatchewan 2021 Statement of Verification.pdf

Page/ section reference

All document

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

46

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 TIER - ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

Alberta TIER - ETS

% of Scope 1 emissions covered by the ETS
87.7

% of Scope 2 emissions covered by the ETS
46.3

Period start date
January 1 2021

Period end date
December 31 2021

Allowances allocated
1331045

Allowances purchased
39656

Verified Scope 1 emissions in metric tons CO2e
1308202

Verified Scope 2 emissions in metric tons CO2e
125285.85

Details of ownership
Facilities we own and operate

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

The Alberta Technology Innovation and Emissions Reduction (TIER) system, which came into force on January 1, 2020, is an intensity-based system in which facilities greater than 100kt (Large Final Emitters) are compared to either a high-performance benchmark or a facility-specific benchmark which is established through historical performance. Oil and gas facilities which emit less than 100kt can either opt into the program or come together to form an aggregate facility.

Our compliance strategy is focused on several activities, including but not limited to, closely monitoring our emissions performance, sharing that information internally to enable business decisions, pursuing opportunities to cost-effectively maximize efficiencies and/or reduce emissions intensities (optimizing utilization, investing in technology, supporting renewables), effectively manage earned credits, and offsetting our emissions by purchasing credits when necessary.

Keyera monitors GHG regulatory developments in our operating jurisdictions including potential changes to facility benchmarks and carbon pricing. We regularly analyze and forecast the GHG performance of Keyera's facilities and the relative performance of Keyera's facilities compared to benchmarks based on available data.

We will continue to execute our strategy as we work to achieve our GHG target of a 25% reduction in emissions intensity by 2025 and a 50% reduction in 2035 (using 2019 as our baseline year).

C11.2

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

Yes

C11.2a

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

Credit origination or credit purchase

Credit origination

Project type

Other, please specify (Emissions Performance Credit (EPC) Registry operated by CSA Group in partnership with the Government of Alberta)

Project identification

N/A

Verified to which standard

Other, please specify (ISO14064-3 Standard)

Number of credits (metric tonnes CO2e)

121981

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

Credits cancelled

No

Purpose, e.g. compliance

Compliance

Credit origination or credit purchase

Please select

Project type

Other, please specify (Emissions Performance Credit (EPC) Registry operated by CSA Group in partnership with the Government of Alberta.)

Project identification

N/A

Verified to which standard

Other, please specify (ISO14064-3 Standard)

Number of credits (metric tonnes CO2e)

59482

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

Credits cancelled

Yes

Purpose, e.g. compliance

Compliance

Credit origination or credit purchase

Credit purchase

Project type

Other, please specify (Emissions Performance Credit (EPC) Registry operated by CSA Group in partnership with the Government of Alberta.)

Project identification

N/A

Verified to which standard

Other, please specify (ISO14064-3 Standard)

Number of credits (metric tonnes CO2e)

39656

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

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
- Change internal behavior
- Drive energy efficiency
- Drive low-carbon investment
- Stress test investments
- Identify and seize low-carbon opportunities

GHG Scope

- Scope 1
- Scope 2

Application

Our internal carbon price is based on the Canadian federal carbon pricing which was \$40/t in 2021, and is scheduled to increase to \$50/t in 2022, and to \$170/t by 2030. Our carbon price is used for internal forecasting for compliance costs for large final emitters (LFE) facilities and the aggregate facility. For new projects, acquisitions and major investments carbon pricing is built in the capital investment framework to evaluate financials and cost-benefits. Carbon pricing is also used by project managers and associated teams in our project delivery system to drive decision on equipment selection and efficient design of the plant, leveraging technologies that lead to low emissions. The carbon price and impacts are communicated to internal project stakeholders to help align business decisions with targets and risks.

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

40

Variance of price(s) used

40-170

Type of internal carbon price

Shadow price

Impact & implication

Our carbon pricing provides a mechanism for understanding the impacts on regulatory compliance and implementation of future projects, specifically within the Canadian oil and gas context. It influences decisions that Keyera makes in terms of investments in technology, optimization plans, acquisition/divestitures and new products and services for our industry customers.

C12. Engagement

C12.1

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

- Yes, our suppliers
- Yes, our customers/clients
- Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

3

% total procurement spend (direct and indirect)

5

% of supplier-related Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Keyera has engaged with product suppliers who have the following characteristics: 1) are considered large product suppliers, 2) are currently capturing product emissions data; 3) have expressed interest in collaborating in emissions reductions. We engage with these suppliers of product to explore emission-reduction opportunities, such as products to improve production efficiency or products that have a lower-associated emission (such as biofuels).

Impact of engagement, including measures of success

To this point, our engagement has led to discussions of how to improve product emissions efficiency; however, we do not have quantitative measurements yet.

Comment

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Collaborate with suppliers on innovative business models to source renewable energy

% of suppliers by number

0

% total procurement spend (direct and indirect)

0

% of supplier-related Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Keyera is actively pursuing the increased use of renewable energy where possible. Currently we have signed a power purchase agreement for solar generation. We are also investigating further wind opportunities, as well as other renewable energy arrangements.

Impact of engagement, including measures of success

Keyera signed a 15-year power purchase agreement, and this is forecasted to produce the equivalent of approximately 10 percent of Keyera annual power consumption.

Comment

The percentage of suppliers is less than 0 and procurement spend is also less than zero.

C12.1b

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

Type of engagement & Details of engagement

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts
----------------------------	---

% of customers by number

3

% of customer - related Scope 3 emissions as reported in C6.5

0

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

In developing our diluent handling services and infrastructure, Keyera has engaged with upstream producers to understand how we can assist them with reducing their emissions. Keyera has facilities and connectivity in the Edmonton/Fort Saskatchewan area which has allowed us to provide lighter condensate which helps reduce viscosity and the pump energy required for bitumen. This helps our customers decarbonize their production. We also provide these customers with a diluent reducing agent. When used as a solvent, operators can realize significant steam reductions in their in-situ operations.

Impact of engagement, including measures of success

As indicated by one Keyera customer, when added to crude, solvents can boost output and reduce its greenhouse gas emissions intensity per barrel by 25 percent. By understanding the climate-related needs of our customers and identifying solvents as a solution to reduce fuel needs, Keyera has helped our oil sands customers reduce the carbon emissions of their products.

C12.1d

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

As part of our emissions management, including our GHG targets, Keyera works to understand our emissions beyond operations and gather information and evaluate emissions of the assets that we have an equity stake. We engage with current equity partners, which are primarily located in Alberta, to gather both scope 1 and scope 2 emissions to assess the emissions across our portfolio. In addition, before entering a new partnership, taking an equity position, or making an acquisition, we evaluate the overall emissions impact of the opportunity.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, but we plan to have one in the next two years

Attach commitment or position statement(s)

<Not Applicable>

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

Keyera works to ensure direct and indirect activities that influence policy are aligned with our climate change strategy through several channels. Our External Affairs Team is responsible for Keyera's overall policy and regulatory review and activities, including coordinating with the appropriate internal subject matter experts and representatives. For climate-related issues, this would include the Sustainability Team. The External Affairs Team, Sustainability Team and Communication Team all report to the Senior Vice-President, General Counsel who has oversight (including ensuring alignment with climate strategy and position) on Keyera's policy engagements, industry involvement and external relations activities. The SVP has oversight over Keyera's semi-annual reporting to the Alberta Lobbyists Act which regulates lobbying activities in Alberta. As part of the Act reporting requirements, Keyera provides information with respect to who is accessing and seeking to influence government, a description of these lobbying activities, as well as funding requested and funding received. The SVP also has oversight of Keyera's membership in industry associations and community investment activities. In addition, Keyera's Executive team is consulted on climate-related issues and potential adjustments advocacy. This Executive reviews core regulatory and external/public disclosures, including climate change matters. These types of disclosures are also reviewed by Keyera's Disclosure Committee. Furthermore, Keyera has Political Activities Guidance, outlined in Code of Business Conduct Policy, which dictates that Keyera and its employees are not to make any contributions or contribution in-kind to political parties or any committees unless approved in advance by senior management.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Focus of policy, law, or regulation that may impact the climate

Mandatory climate-related reporting

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Technology Innovation Emission Reduction

Policy, law, or regulation geographic coverage

Regional

Country/region the policy, law, or regulation applies to

Canada

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Keyera has attended round table discussions and engaged one-on-one with government and regulators in policies related to climate change and GHG monitoring and reporting, and GHG targets. Specifically, we have engaged on policies and discussions related to Technology Innovation Emission Reduction. Our aim is to ensure that Keyera's and the industry's interests are represented.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is not aligned

Focus of policy, law, or regulation that may impact the climate

Carbon tax

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Technology Innovation Emission Reduction

Policy, law, or regulation geographic coverage

Regional

Country/region the policy, law, or regulation applies to

Canada

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Keyera has attended round table discussions and engaged one-on-one with government and regulators in policies related to climate change and GHG monitoring and reporting, and GHG targets. Specifically, we have engaged in policies and discussions related to Technology Innovation Emission Reduction. Our aim is to ensure that Keyera's and the industry's interests are represented.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is not aligned

Focus of policy, law, or regulation that may impact the climate

Electricity grid access for renewables

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Technology Innovation Emission Reduction

Policy, law, or regulation geographic coverage

Regional

Country/region the policy, law, or regulation applies to

Canada

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Keyera has attended round table discussions and engaged one-on-one with government and regulators in policies related to climate change and GHG monitoring and reporting, and GHG targets. Specifically, we have engaged in policies and discussions related to Technology Innovation Emission Reduction. Our aim is to ensure that Keyera's and the industry's interests are represented.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is not aligned

Focus of policy, law, or regulation that may impact the climate

Methane emissions

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Federal Methane Regulation Directive 60

Policy, law, or regulation geographic coverage

Regional

Country/region the policy, law, or regulation applies to

Canada

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Keyera has engaged in round tables and discussions with government for an effective regulatory framework to manage methane emissions from the oil and gas industry. Keyera has advocated for an effective regulatory framework that supports full-life cycle regulation of midstream and downstream assets in a consistent and coordinated manner promoting competitive business environment.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

<Not Applicable>

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is not aligned

Focus of policy, law, or regulation that may impact the climate

Other, please specify

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Clean Fuel Regulation

Policy, law, or regulation geographic coverage

Regional

Country/region the policy, law, or regulation applies to

Canada

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Keyera has attended round table discussions and engaged one-on-one with government and regulators regarding clean fuel regulation. Keyera has advocated for stackability of credit generation capacity between clean fuel regulation and TIER.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

<Not Applicable>

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is not aligned

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Canadian Association of Petroleum Producers

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We have already influenced them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

CAPP's position is that climate change is a global issue requiring action from individuals, governments, organizations and industries around the world. Canada's oil and gas sector is uniquely positioned to help meet global climate commitments as the global supplier of choice in a world that demands a lower carbon energy future. Continued investment in innovation and technology is driving down emissions intensity and positions. Canada's oil and gas industry as part of the global solution needed to tackle the global climate challenge. CAPP has eight climate change positions described on their website: <https://www.capp.ca/explore/industrys-climate-commitment/> Yes, Keyera is attempting to influence CAPP's position. To do this, Keyera provides our emissions data and policy impact analysis to CAPP. Specifically, we provide a midstream sector perspective to CAPP, helping to provide a better understanding of the impacts of regulatory policies (such as carbon pricing and reporting) on the whole oil and gas value chain. We support CAPP's position that the Canadian oil and gas sector must drive down emissions intensity as part of the global solution to tackle climate change.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization

Non-Governmental Organization (NGO) or charitable organization

State the organization to which you provided funding

Calgary Chamber of Commerce

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

1500

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

The Chamber of Commerce's vision is for a net-zero world in which Alberta's energy industry is competitive and is a leader in innovation and emissions reduction technology. The Chamber contributes to conversations regarding investing in emissions reduction, decarbonizing technology, and emphasizing Canada's position as a leader in providing solutions to address climate change.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

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, incorporating the TCFD recommendations

Status

Complete

Attach the document

Climate-Report-2021.pdf

Page/Section reference

Pages 1-44

Content elements

Governance
 Strategy
 Risks & opportunities
 Emissions figures
 Emission targets
 Other metrics

Comment

Publication

In mainstream reports

Status

Complete

Attach the document

Annual-Information-Form-2021.pdf

Page/Section reference

Pages 33-45

Content elements

Risks & opportunities

Comment

Publication

In mainstream reports

Status

Complete

Attach the document

2021-Keyera-Information-Circular.pdf

Page/Section reference

Pages 4, 28, 54

Content elements

Governance

Comment

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Please select	<Not Applicable>	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Please select	<Not Applicable>	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	Please select	<Not Applicable>

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Please select	<Not Applicable>

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Please select	Please select

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
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C16. 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.

(C0.5) The reporting boundary for our emission data is operational control and our GHG targets are equity-based. These equity-based numbers can be found in question C4.1.

(C8.1) This range is approximate and includes Marketing opex in the numbers.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Dow Chemicals has requested Keyera to provide Scope 1 and Scope 2 emissions associated with ethane product sales to Dow's Fort Saskatchewan Plant Site. Keyera has allocated its Scope 1 and Scope 2 emissions to ethane product sales to Dow. Allocation is based on share of ethane product sales to Dow. Scope 1 and Scope 2 emissions calculated at Keyera's Fort Saskatchewan Plant are third-party verified under Alberta's TIER regulation.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	4984906000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member

The Dow Chemical Company

Scope of emissions

Scope 1

Allocation level

Commodity

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO₂e

7316

Uncertainty (±%)

5

Major sources of emissions

Fuel gas and electricity used for fractionation and delivery of spec ethane.

Verified

Yes

Allocation method

Other, please specify (Allocation is based on share of ethane product sales to Dow.)

Market value or quantity of goods/services supplied to the requesting member

108272

Unit for market value or quantity of goods/services supplied

Other, please specify (Cubic meters (m³).)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

GHG sources are identified based on direct and indirect energy consumption at Keyera Fort Saskatchewan facility. Sources of Scope 1 emissions are fuel gas burning equipment at fractionation trains and sources of Scope 2 emissions are the electric driven equipment. No major limitations to this process. Allocation is based on percentage of product sold to DOW and proration of Scope 1 and Scope 2 emissions based on that percentage.

Requesting member

The Dow Chemical Company

Scope of emissions

Scope 2

Allocation level

Commodity

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO₂e

12655

Uncertainty (±%)

5

Major sources of emissions

Fuel gas and electricity used for fractionation and delivery of spec ethane.

Verified

Yes

Allocation method

Other, please specify (Allocation based on share of volumes of product species (converted to cubic meters of oil equivalent) sent to Dow in total volume processed at Keyera's Fort Saskatchewan plant.)

Market value or quantity of goods/services supplied to the requesting member

108272

Unit for market value or quantity of goods/services supplied

Other, please specify (Cubic meters (m³).)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

GHG sources are identified based on direct and indirect energy consumption at Keyera Fort Saskatchewan facility. Sources of Scope 1 emissions are fuel gas burning equipment at fractionation trains and sources of Scope 2 emissions are the electric driven equipment. No major limitations to this process. Allocation is based on percentage of product sold to DOW and proration of Scope 1 and Scope 2 emissions based on that percentage.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

Government of Alberta. 2021. Alberta's GHG Quantification Methodologies (V 2.1, March 2021)

Environment and Climate Change Canada. 2021. National Inventory Report 1990-2019: Greenhouse Gas Sources and Sinks in Canada. Part 3.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	Further provincial, national, or international guidelines on Scope 3 emissions calculation that would resolve the challenges of allocation of energy usage to diverse product lines or product blends. In absence of guidance on allocation of energy usage, there is no mechanism to prevent double counting of the energy usage in product processing or to ensure the use of the same unit of measurement for the same types of the products. Scope 3 emission calculation methodologies are not regulated. Different product suppliers can use different calculation methodologies. This will indirectly result in disclosure of Scope 3 emission intensities for the products or product blends that are not comparable between various suppliers using different calculation methodologies. Disclosure of incomparable product emission intensities is considered a business sensitive information because some suppliers' products can gain competitive advantage based on different calculation methodologies.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Our allocation of emissions to customers is case by case basis at the moment and undertaken when requested by our customers. For future requests, we are planning to address them in unified way and ensure accurate balance of allocation based on product dispositions to different customers. This will be built on existing experience and involve quality assurance review of calculation methodologies and verification of allocation balance.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member

The Dow Chemical Company

Group type of project

New product or service

Type of project

New product or service that reduces customers products / services operational emissions

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

Other, please specify (Still in discussion)

Estimated lifetime CO2e savings

Estimated payback

Other, please specify (Unknown)

Details of proposal

Keyera and Dow are currently in discussion about potential CO2 transport, Cracker Offgas and H2 manufacture and H2 storage for their current operations and future plans around ethane cracking in Ft. Saskatchewan.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Yes, I will provide data

SC4.1a

(SC4.1a) Give the overall percentage of total emissions, for all Scopes, that are covered by these products.

1.13

SC4.2a

(SC4.2a) Complete the following table for the goods/services for which you want to provide data.

Name of good/ service

Keyera's ethane product sold to DOW Chemicals at Fort Saskatchewan, AB

Description of good/ service

Sale of Ethane product to DOW Chemicals via AEGS pipeline.

Type of product

Intermediate

SKU (Stock Keeping Unit)

cubic meters - m3

Total emissions in kg CO2e per unit

184.45

±% change from previous figure supplied

Date of previous figure supplied

Explanation of change

N/A - reported for the first time

Methods used to estimate lifecycle emissions

GHG Protocol Product Accounting & Reporting Standard

SC4.2b

(SC4.2b) Complete the following table with data for lifecycle stages of your goods and/or services.

Name of good/ service

Keyera's ethane product sales to DOW Chemicals at Fort Saskatchewan, AB

Please select the scope

Scope 1

Please select the lifecycle stage

Production

Emissions at the lifecycle stage in kg CO2e per unit

67.57

Is this stage under your ownership or control?

Yes

Type of data used

Primary and secondary

Data quality

Calculation of Scope 1 and 2 GHG emissions at Keyera's Fort Saskatchewan Fractionation plant is based on Alberta GHG quantification methodologies (Version 2.2, December 2021) document and based on engineering methods acceptable in the province of operation. Allocation of Scope 1 and 2 GHG emissions to Dow C2+ deliveries is based on metered data.

If you are verifying/assuring this product emission data, please tell us how

As required by the Technology Innovation and Emissions Reduction (TIER) program in Alberta, all facilities larger than 100kT must go through third-party verification to confirm GHG emissions from all sources (Combustion, venting, flaring, etc.). Keyera's Fort Saskatchewan Fractionation plant is larger than a 100kT facility. During verification process, the breakdown of the emissions into the individual components and categories is verified, depending on the requirements of TIER.

Name of good/ service

Keyera's ethane product sales to DOW Chemicals at Fort Saskatchewan, AB.

Please select the scope

Scope 1

Please select the lifecycle stage

Storage

Emissions at the lifecycle stage in kg CO2e per unit

67.57

Is this stage under your ownership or control?

Yes

Type of data used

Primary and secondary

Data quality

Calculation of Scope 1 and 2 GHG emissions at Keyera's Fort Saskatchewan Fractionation plant is based on Alberta GHG quantification methodologies (Version 2.1, March 2021) document and based on engineering methods acceptable in the province of operation. Allocation of Scope 1 and 2 GHG emissions to Dow ethane sales is based on metered data.

If you are verifying/assuring this product emission data, please tell us how

As required by the Technology Innovation and Emissions Reduction (TIER) program in Alberta, all facilities larger than 100kT must go through third-party verification to confirm GHG emissions from all sources (Combustion, venting, flaring, etc.). Keyera's Fort Saskatchewan Fractionation plant is larger than 100kT facility. During verification process, the breakdown of the emissions into the individual components and categories is verified, depending on the requirements of TIER.

Name of good/ service

Keyera's ethane product sales to DOW Chemicals at Fort Saskatchewan, AB.

Please select the scope

Scope 2

Please select the lifecycle stage

Production

Emissions at the lifecycle stage in kg CO2e per unit

116.88

Is this stage under your ownership or control?

Yes

Type of data used

Primary and secondary

Data quality

Calculation of Scope 1 and 2 GHG emissions at Keyera's Fort Saskatchewan Fractionation plant is based on Alberta GHG quantification methodologies (Version 2.1, March 2021) document and based on engineering methods acceptable in the province of operation. Allocation of Scope 1 and 2 GHG emissions to Dow ethane sales is based on metered data.

If you are verifying/assuring this product emission data, please tell us how

As required by the Technology Innovation and Emissions Reduction (TIER) program in Alberta, all facilities larger than 100kT must go through third-party verification to confirm GHG emissions from all sources (Combustion, venting, flaring, etc.). Keyera's Fort Saskatchewan Fractionation plant is larger than 100kT facility. During verification process, the breakdown of the emissions into the individual components and categories is verified, depending on the requirements of TIER.

Name of good/ service

Keyera's ethane product sales to DOW Chemicals at Fort Saskatchewan, AB.

Please select the scope

Scope 2

Please select the lifecycle stage

Storage

Emissions at the lifecycle stage in kg CO2e per unit

116.88

Is this stage under your ownership or control?

Yes

Type of data used

Primary and secondary

Data quality

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SC4.2c

(SC4.2c) Please detail emissions reduction initiatives completed or planned for this product.

Name of good/ service	Initiative ID	Description of initiative	Completed or planned	Emission reductions in kg CO2e per unit
Product sales to DOW Chemicals at Fort Saskatchewan, AB.	Please select	Keyera and Dow are currently in discussion about potential CO2 transport, Cracker offgas and H2 manufacture and H2 storage for their current operations and future plans around ethane cracking in Ft. Saskatchewan.	Please select	

SC4.2d

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?

Yes

SC4.2e

(SC4.2e) Explain which initiatives have been driven by requesting members.

Requesting member(s)	Name of good/service	Initiative ID
The Dow Chemical Company	Ethane product sales to DOW Chemicals at Fort Saskatchewan, AB	Please select

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms