

Pembina Pipeline Corporation

# 2024 CDP Corporate Questionnaire 2024

# Contents

C1. Introduction	.7
(1.3) Provide an overview and introduction to your organization.	7
(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years	8
(1.5) Provide details on your reporting boundary.	8
(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?	9
(1.24) Has your organization mapped its value chain?	11
C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities	<b>13</b> tal
(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?	.14
(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities	15
(2.4) How does your organization define substantive effects on your organization?	43
C3. Disclosure of risks and opportunities	45
(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?	45
(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future	45
(3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by	53
(3.5.3) Complete the following table for each of the tax systems you are regulated by.	54
(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?	56
(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?	56
(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.	56
C4. Governance	63

(4.1) Does your organization have a board of directors or an equivalent governing body? .....63

(4.1.1) Is there board-level oversight of environmental issues within your organization?	
(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental iss the board's oversight of environmental issues	sues and provide details of 64
(4.2) Does your organization's board have competency on environmental issues?	
(4.3) Is there management-level responsibility for environmental issues within your organization?	
(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the n	ames of individuals) 67
(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?	75
(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of in	ndividuals)76
(4.6) Does your organization have an environmental policy that addresses environmental issues?	77
(4.6.1) Provide details of your environmental policies.	77
(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?	79
(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the environment?	/ (positively or negatively) 79
(4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging on the reporting year?	directly with policy makers in
(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment thro other intermediary organizations or individuals in the reporting year.	ough trade associations or 
(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in place response. Please attach the publication.	es other than your CDP 135
C5. Business strategy	
(5.1) Does your organization use scenario analysis to identify environmental outcomes?	139
(5.1.1) Provide details of the scenarios used in your organization's scenario analysis.	139
(5.1.2) Provide details of the outcomes of your organization's scenario analysis.	141
(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?	142
(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy	143
(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.	146
(5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?	150
(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?	150
(5.5.7) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years	
(5.6) Break down, by fossil fuel expansion activity, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years	153

(5.10) Does your organization use an internal price on environmental externalities?	
(5.11) Do you engage with your value chain on environmental issues?	
(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?	155
(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compl place.	ance measures in 155
(5.11.7) Provide further details of your organization's supplier engagement on environmental issues.	156
(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.	
6. Environmental Performance - Consolidation Approach	
(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data	
7 Environmental performance - Climate Change	161
(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this (	lisclosure of
emissions data?	161
(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?	
(7.1.3) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in 7.1.1 a	and/or 7.1.2? 161
(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions	
(7.3) Describe your organization's approach to reporting Scope 2 emissions	
(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your sele boundary which are not included in your disclosure?	cted reporting
(7.5) Provide your base year and base year emissions.	
(7.6) What were your organization's gross global Scope 1 emissions in metric tons CO2e?	
(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?	
(7.8) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.	
(7.8.1) Disclose or restate your Scope 3 emissions data for previous years.	
(7.9) Indicate the verification/assurance status that applies to your reported emissions	
(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions and attach the relevant statements	175
(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements	
(7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?	
(7.10.1) 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 previous year.	compare to the 

(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions	s figure?
(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?	184
(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?	185
(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP)	185
(7.15.4) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type	187
(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.	191
(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.	192
(7.17.1) Break down your total gross global Scope 1 emissions by business division.	192
(7.19) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e	192
(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.	192
(7.20.1) Break down your total gross global Scope 2 emissions by business division.	192
(7.21) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e	193
(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?	193
(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.	193
(7.24) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.	194
(7.29) What percentage of your total operational spend in the reporting year was on energy?	195
(7.30) Select which energy-related activities your organization has undertaken.	195
(7.30.1) Report your organization's energy consumption totals (excluding feedstocks) in MWh	196
(7.30.6) Select the applications of your organization's consumption of fuel.	198
(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type	199
(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.	202
(7.45) 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.	litional 203
(7.48) Provide the intensity figures for Scope 1 emissions (metric tons CO2e) per unit of hydrocarbon category.	205
(7.53) Did you have an emissions target that was active in the reporting year?	206
(7.53.2) Provide details of your emissions intensity targets and progress made against those targets.	206
(7.54) Did you have any other climate-related targets that were active in the reporting year?	210
(7.54.4) Indicate which targets reported in 7.53.1/2 incorporate methane emissions, or if you do not have a methane-specific emissions reduction target for your oi gas activities, please explain why not and forecast how your methane emissions will change over the next five years.	l and 211

(7.55) 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.	211
(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.	211
(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.	211
(7.55.3) What methods do you use to drive investment in emissions reduction activities?	213
(7.57) Describe your organization's efforts to reduce methane emissions from your activities	214
(7.61) 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?	214
(7.61.1) 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	214
(7.62) If flaring is relevant to your oil and gas production activities, describe your organization's efforts to reduce flaring, including any flaring reduction targets.	214
(7.74) Do you classify any of your existing goods and/or services as low-carbon products?	215
(7.79) Has your organization canceled any project-based carbon credits within the reporting year?	215
C13. Further information & sign off	. 216
(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by third party?	a 216
(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?	216
(13.3) Provide the following information for the person that has signed off (approved) your CDP response.	217

# **C1. Introduction**

(1.3) Provide an overview and introduction to your organization.

## (1.3.2) Organization type

Select from:

Publicly traded organization

# (1.3.3) Description of organization

Pembina owns an integrated network of hydrocarbon liquids and natural gas pipelines, gas gathering and processing facilities, oil and natural gas liquids ("NGL") infrastructure and logistics services, and an export terminals business. Through our integrated value chain, we seek to provide safe and reliable energy solutions that connect producers and consumers across the world, support a more sustainable future and benefit our customers, investors, employees and communities. Our purpose reflects the breadth and diversity of our operations and future aspirations: We deliver extraordinary energy solutions so the world can thrive. Our Operations: Pembina's operations are structured into three divisions: Pipelines Division: We own and operate a strategically located pipeline transportation, terminalling, storage and rail services network that serves various markets and basins across North America. Facilities Division: We own and operate natural gas processing and NGL fractionation facilities, export and storage terminals, and related infrastructure. Marketing and New Ventures Division: To support our customers' overall business interests, we seek to create new markets and further enhance existing markets through the development of infrastructure. For more information, please visit pembina.com. Forward-Looking Statements: This document contains certain forward-looking statements and forward-looking information (collectively, "forwardlooking statements"), including forward-looking statements within the meaning of the "safe harbor" provisions of applicable securities legislation, that are based on Pembina's current expectations, estimates, projections and assumptions in light of its experiences and its perception of historical trends. In some cases, forwardlooking statements can be identified by terminology such as "expect", "will", "could", "assess", "explore", "potential", "continue", "would", "may", "explore", "likely", "plan", "develop", "to be", "target" "believe" and similar expressions suggesting future events or future performance. In particular, this document contains forwardlooking statements pertaining to, without limitation, the following: estimates relating to the financial or strategic impact of certain climate-related risks and opportunities on Pembina's business; statements and expectations relating to Pembina's ESG initiatives, goals and targets, including future actions taken in relation thereto and plans, targets and strategies with respect to GHG emissions and offsets; expected outcomes of Pembina's GHG emission intensity reduction target and the benefits and timing thereof; completion and in-service dates; expectations relating to the development and anticipated benefits of Pembina's new projects and developments, including Cedar LNG and the ACG, and the expected performance and timing thereof;; and expectations relating to PPAs, including the anticipated environmental benefits thereof. Readers are cautioned that events or circumstances could cause results to differ materially from those predicted, forecasted or projected. The forward-looking statements contained in this document speak only as of the date of this document. For additional information on these forward-looking statements, the key assumptions on which such forward-looking statements are based and certain risks that may result in actual future results differing from such forward-looking statements, please refer to the Pembina's public disclosure documents including, among other things, those detailed under the heading "Risk Factors" in Pembina's management's discussions and analysis and annual information form, each for the year ended December 31, 2023 and from time to time in Pembina's public disclosure documents available at www.sedarplus.ca, www.sec.gov and through Pembina's website at www.pembina.com. Pembina does not undertake any obligation to publicly update or revise any forward-looking statements or information contained herein, except as required by applicable laws. The forward-looking statements contained in this document are expressly gualified by this cautionary statement.

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

# (1.4.1) End date of reporting year

12/31/2023

# (1.4.2) Alignment of this reporting period with your financial reporting period

Select from:

🗹 Yes

(1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:

✓ Yes

# (1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:

✓ Not providing past emissions data for Scope 1

# (1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:

✓ Not providing past emissions data for Scope 2

# (1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:

✓ 1 year

# (1.5) Provide details on your reporting boundary.

Select from:

🗹 No

## (1.5.2) How does your reporting boundary differ to that used in your financial statement?

The audited annual consolidated financial statements of the company include the accounts of Pembina, its subsidiary companies, partnerships and any investments in associates and joint arrangements as at and for the year ended December 31, 2023. Refer to our Management Discussions and Analysis for the year ended December 31, 2023, for further details. Our 2023 Sustainability Report covers the performance of Pembina Pipeline Corporation and includes its subsidiaries and joint ventures operated by Pembina. Specific to GHG reporting Pembina has selected the Operational Control approach to define our organizational boundaries and includes all material sources and sinks associated with facilities pipelines and corporate operations that are in direct operational control by Pembina and Pembina subsidiaries.

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

# **ISIN code - bond**

# (1.6.1) Does your organization use this unique identifier?

Select from:

🗹 No

# **ISIN code - equity**

# (1.6.1) Does your organization use this unique identifier?

Select from:

✓ Yes

# (1.6.2) Provide your unique identifier

CA7063271034

# **CUSIP** number

# (1.6.1) Does your organization use this unique identifier?

Select from:

🗹 No

# Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:

🗹 Yes

# (1.6.2) Provide your unique identifier

TSX: PPL; NYSE: PBA

# SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

🗹 No

# LEI number

# (1.6.1) Does your organization use this unique identifier?

Select from:

✓ Yes

# (1.6.2) Provide your unique identifier

### **D-U-N-S number**

## (1.6.1) Does your organization use this unique identifier?

Select from:

🗹 Yes

# (1.6.2) Provide your unique identifier

247018146

## Other unique identifier

# (1.6.1) Does your organization use this unique identifier?

Select from:

🗹 No

# (1.24) Has your organization mapped its value chain?

# (1.24.1) Value chain mapped

Select from:

☑ Yes, we have mapped or are currently in the process of mapping our value chain

# (1.24.2) Value chain stages covered in mapping

Select all that apply

☑ Upstream value chain

☑ Downstream value chain

## (1.24.3) Highest supplier tier mapped

✓ Tier 1 suppliers

## (1.24.4) Highest supplier tier known but not mapped

Select from:

✓ All supplier tiers known have been mapped

## (1.24.7) Description of mapping process and coverage

We focus on working with long-term, strategic suppliers that demonstrate a commitment to engaging their workers, providing safe working conditions, and advancing environmental responsibility in accordance with Pembina's Supplier Code of Conduct. This includes working to combat the risks of Modern Slavery. Pembina has mapped Modern Slavery-related risks in our supply chains in respect of all active Tier One Suppliers. These suppliers were reviewed and assessed, with an emphasis on our high spend and high risk, suppliers, using the Better Trade Tool maintained by the United States Department of Labor (Bureau of International Labor Affairs). This tool focused on high risk regions to highlight any commodities with a high probability of employing Modern Slavery in the manufacturing process. The high risk regions identified were China and Mexico and any suppliers in these regions were manually investigated using data within our purchase orders to determine which goods, if any, they provided to Pembina. Our overall assessment of the risk of Modern Slavery being present with our direct suppliers is low. We do understand that our suppliers may use products that originate from other jurisdictions, and our suppliers will all have their own global supply chains. C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

Short-term

(2.1.1) From (years)	
0	
(2.1.3) To (years)	
2	

## (2.1.4) How this time horizon is linked to strategic and/or financial planning

Our short-term, medium-term and long-term planning horizons are aligned to our strategic planning process.

# Medium-term

# (2.1.1) From (years)

2

# (2.1.3) To (years)

5

# (2.1.4) How this time horizon is linked to strategic and/or financial planning

Our short-term, medium-term and long-term planning horizons are aligned to our strategic planning process.

# Long-term

# (2.1.1) From (years)

5

# (2.1.2) Is your long-term time horizon open ended?

Select from:

🗹 No

(2.1.3) To (years)

10

## (2.1.4) How this time horizon is linked to strategic and/or financial planning

While Pembina's strategy embraces energy transition, we also understand that, if not adequately addressed, climate-related risks may impact our direct operations, as well as those upstream and downstream in our value chain. We closely monitor changing regulatory requirements, routinely assess the impact of carbon pricing and changes in technology and track projected future demand for energy products. Climate-related criteria have been incorporated into our capital allocation decisions, to help align our operations and emissions reduction activities. From a physical climate risk perspective, we currently assess the impact of acute physical risks as part of our business interruption and contingent business interruption exposures, largely through asset-specific risk engineering reviews. These asset-specific reviews, offered via a third-party, include site surveys and audits that evaluate the effects of natural hazards, including climate, on our assets as well as risk controls. We couple this external assessment with business unit evaluations to analyze the potential financial and operational impact of physical climate risk to our assets.

# (2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

Process in place	Risks and/or opportunities evaluated in this process
Select from:	Select from:
✓ Yes	☑ Both risks and opportunities

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

✓ Risks

Opportunities

## (2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

✓ Upstream value chain

✓ Downstream value chain

# (2.2.2.4) Coverage

Select from:

✓ Full

(2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

## (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

## (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

Medium-term

✓ Long-term

## (2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

## (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

# (2.2.2.16) Further details of process

Our Enterprise Risk Management ("ERM") program underpins the identification, measurement, prioritization and management of enterprise level risk across our company. Climate-related risks and opportunities are considered within our ERM program, and beyond ERM, are broadly considered as part of Pembina's corporate strategy as it relates to energy transition. Our ERM policy defines principles and specific expectations associated with our risk management activities and governance. We consider both qualitative and quantitative factors when defining a substantial financial or strategic impact on our business. Assessments of identified risks and opportunities include the evaluation of potential impacts on financial results, health, safety, environmental conditions, operating assets and reputation. It can also include external reports on macro considerations and associated risks we see in the market, political and business environments. The associated probabilities are also considered, and those with higher potential financial or strategic impact are prioritized accordingly for investigation, management, mitigation or implementation. All employees are required to sign-off on Pembina's enterprise risk management policy which outlines responsibilities for the identification, reporting and mitigation of risks. Once the Enterprise Risk Management Committee ("ERC") has identified a risk, an executive officer is assigned as risk owner based on associated oversight and portfolio responsibility. The ERC meets at least quarterly to review the performance, appropriateness and current business environment surrounding our risk management activities, with a more comprehensive review completed annually. As part of the review process, the identified risk is evaluated against our scenario planning to help assess the impact to our corporate strategy. Management reports periodically to the Board about the risks that have been

identified by our ERM program and at least once per year, presents to the Board a summary of the ERC's review of risk identification, management and mitigation measure status. Climate-related risks associated with Pembina's direct operations, as well as upstream and downstream in our value chain have been identified through the ERM process. Refer to the specific risks and opportunities below for further details.

# Row 2

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

✓ Risks

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

☑ Upstream value chain

Downstream value chain

# (2.2.2.4) Coverage

Select from:

🗹 Full

(2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

## (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

✓ Medium-term

✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

Local

✓ Sub-national

✓ National

# (2.2.2.12) Tools and methods used

#### Other

- Internal company methods
- ✓ Jurisdictional/landscape assessment
- ✓ Partner and stakeholder consultation/analysis
- ✓ Scenario analysis

#### Policy

✓ Carbon pricing mechanisms

✓ Changes to national legislation

☑ Other policy, please specify: Current, Emerging and Changing Regulations

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

✓ Customers

Employees

Investors

✓ Suppliers

✓ Regulators

✓ Local communities

✓ Indigenous peoples

# (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

# (2.2.2.16) Further details of process

Various federal, provincial and state governments have announced intentions to regulate GHG emissions. Some of these regulations are in effect while others remain in various stages of review or implementation. These regulations could impact our existing and/or planned projects or increase capital investment or operating expenses, impacting our financial results if we are unable to recover the resulting capital or operating costs through existing contractual terms or through higher tolls. In response we are: Undertaking annual scenario planning, informed by current and emerging regulation, that evaluates the potential implications of changes in the rate of decarbonization and escalating carbon tax compliance costs to test the resilience of our corporate strategy; Progressing our GHG intensity emissions reduction target; Reducing emissions from our operations through equipment modernization, system optimization and fugitive emissions management; Leveraging our diversified asset portfolio; Upholding our commercial model principles; Meeting or exceeding regulatory compliance obligations within the jurisdictions we operate in; and Actively engaging with government and public sector stakeholders on matters of legislative, regulatory or policy development.

## Row 4

# (2.2.2.1) Environmental issue

#### Select all that apply ✓ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

🗹 Risks

(2.2.2.3) Value chain stages covered

Select all that apply

- ✓ Direct operations
- ✓ Upstream value chain
- ☑ Downstream value chain

# (2.2.2.4) Coverage

Select from:

🗹 Full

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

# (2.2.2.9) Time horizons covered

Select all that apply

#### ✓ Short-term

✓ Medium-term

✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

✓ Site-specific

# (2.2.2.12) Tools and methods used

#### Other

- ✓ Desk-based research
- ✓ External consultants
- ✓ Internal company methods

# (2.2.2.13) Risk types and criteria considered

#### Technology

✓ Transition to lower emissions technology and products

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

Customers

Employees

✓ Investors

- ✓ Local communities
- ✓ Indigenous peoples

✓ Suppliers

✓ Regulators

## (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

# (2.2.2.16) Further details of process

As the world transitions to a lower carbon economy, technology will be a key factor. As energy transition technologies become more cost effective in the long term, changes in customer demand could in turn impact revenues and the Company's assets. Pembina also sees technology as an opportunity to diversify our business and to seek to contribute to a lower carbon economy. Pembina continues to explore technology associated with CCUS, low-carbon hydrogen and hydrogen carriers such as ammonia and methanol and solar to effectively manage Pembina emissions and also contribute positively to a lower-carbon economy. In response we are: Actively exploring and investing in established and emerging technologies to effectively manage our emissions and contribute positively to a lower-carbon economy; Working with government and lending partners to access energy transition grants, incentives and financing; Investing in power purchase agreements and developing small-scale solar projects integrated with our existing assets; and Developing transformational opportunities like Cedar LNG and the proposed ACG and Pembina Low Carbon Complex projects.

### Row 5

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

✓ Risks

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

✓ Upstream value chain

✓ Downstream value chain

# (2.2.2.4) Coverage

Select from:

🗹 Full

(2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

# (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

Medium-term

✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

#### Local

#### ✓ Sub-national

✓ National

# (2.2.2.12) Tools and methods used

#### Other

- ☑ Desk-based research
- External consultants
- ✓ Internal company methods
- ✓ Jurisdictional/landscape assessment

# (2.2.2.13) Risk types and criteria considered

#### Liability

- Exposure to litigation
- ☑ Non-compliance with regulations

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

- ✓ Customers
- Employees
- ✓ Investors
- ✓ Suppliers
- ✓ Regulators

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

🗹 No

- ✓ Local communities
- ✓ Indigenous peoples

# (2.2.2.16) Further details of process

For companies in the energy sector legal risk including potential project delays could increase due to the number and complexity of regulatory requirements as well as the potential for climate-related litigation. In response we are: monitoring jurisdictional regulatory requirements to meet or exceed operational compliance with applicable laws and regulations; aligning disclosure practices with evolving accounting and reporting standards; and developing stakeholder and Indigenous engagement plans and government policy development.

### Row 6

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

🗹 Risks

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

✓ Upstream value chain

✓ Downstream value chain

# (2.2.2.4) Coverage

Select from:

🗹 Full

## (2.2.2.7) Type of assessment

Select from:

## (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

# (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

Medium-term

✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

Local

✓ Sub-national

✓ National

# (2.2.2.12) Tools and methods used

#### Other

✓ Internal company methods

✓ Jurisdictional/landscape assessment

✓ Scenario analysis

# (2.2.2.13) Risk types and criteria considered

#### Market

- ✓ Availability and/or increased cost of raw materials
- ✓ Changing customer behavior
- $\blacksquare$  Uncertainty in the market signals

## (2.2.2.14) Partners and stakeholders considered

Select all that apply

- Customers
- Employees
- Investors
- ✓ Suppliers
- ✓ Regulators

✓ Local communities

✓ Indigenous peoples

## (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

🗹 No

# (2.2.2.16) Further details of process

Changing consumer preferences, new technologies, government regulation or other external factors may result in a transition from fossil-based sources of energy, including energy derived from oil and natural gas, to renewable and other alternative sources of energy. This may lead to lower global demand for crude oil and natural gas and related commodities and in turn may lead to lower prices for crude oil, natural gas and NGL and related commodities. Pembina sees multiple opportunities that support the transition to a lower carbon economy, which involve investments in businesses, operations or assets relating to renewable or other alternative forms of energy. In response we are: Using scenario planning to evaluate the potential implications of changes in the rate of decarbonization and energy demand to test the resilience of our corporate strategy; Continuing to invest in businesses, operations or assets relating to low carbon energy sources to ensure our long-term success and resilience; Leveraging our core competencies to adjust to the changing energy mix through exploring opportunities for new infrastructure services including carbon transportation and sequestration and new forms of energy including hydrogen; Incorporating GHG emissions reductions into our capital allocation and short-term incentive plan compensation; Supporting coastal egress to meet global demand for our products; and Actively engaging with stakeholders to identify potential risks and/or areas of concern and incorporate this input into project design and future operating plans.

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

✓ Risks

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

✓ Upstream value chain

☑ Downstream value chain

# (2.2.2.4) Coverage

Select from:

✓ Full

## (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

# (2.2.2.9) Time horizons covered

Select all that apply

- ✓ Short-term
- ✓ Medium-term
- ✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

## (2.2.2.11) Location-specificity used

Select all that apply

- 🗹 Local
- ✓ Sub-national
- ✓ National

# (2.2.2.12) Tools and methods used

#### Other

✓ Internal company methods

✓ Partner and stakeholder consultation/analysis

# (2.2.2.13) Risk types and criteria considered

#### Reputation

☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback

✓ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)

✓ Stigmatization of sector

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

Customers

Employees

✓ Investors

- ✓ Suppliers
- ✓ Regulators

Local communitiesIndigenous peoples

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

🗹 No

## (2.2.2.16) Further details of process

Pembina's reputation could be negatively impacted by changing public attitudes towards fossil fuels. Impacts from a compromised reputation could include revenue loss, reduction in customer base, delays in obtaining regulatory approvals with respect to growth projects, reduced access to capital, higher cost of capital, or decreased value of Pembina's securities and reduced insurance capacity and coverage. Concerns about the effects of the use of hydrocarbons on climate change and the impact of oil and gas operations on the environment have affected certain investors' sentiments towards investing in the oil and gas industry. As a result of these concerns, some investors have announced that they are no longer willing to fund or invest in oil and gas properties or companies and/or are reducing the amount of such investments over time. Pembina has responded to this concern through executing on our decarbonization strategy to reduce emissions and participate in the energy transition. Furthermore, the company continues to strengthen the transparency of the information it publishes on climate-related issues including, governance, risk, opportunities and performance through our annual Sustainability Report aligned to global reporting frameworks. Further, we have linked our financing strategy to achieving our emission reduction targets through a sustainability-linked loan. The 1 billion sustainability-linked revolving credit facility contains pricing adjustments that reduce or increase borrowing costs based on our performance relative to our GHG emissions intensity reduction performance targets that align with our trajectory towards our 2030 goal. Finally, Pembina actively engages with investors, lenders and insurers to understand and address their concerns.

## Row 8

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

✓ Risks

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

✓ Upstream value chain

☑ Downstream value chain

# (2.2.2.4) Coverage

Select from:

🗹 Full

## (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

# (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

✓ Medium-term

✓ Long-term

# (2.2.2.10) Integration of risk management process

#### Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

✓ Site-specific

🗹 Local

## (2.2.2.12) Tools and methods used

#### **Enterprise Risk Management**

✓ Risk models

✓ Stress tests

#### Other

✓ External consultants

✓ Jurisdictional/landscape assessment

## (2.2.2.13) Risk types and criteria considered

#### Acute physical

✓ Drought

- ✓ Landslide
- ✓ Wildfires
- ✓ Subsidence
- ✓ Cold wave/frost

- ✓ Cyclones, hurricanes, typhoons
- ✓ Heavy precipitation (rain, hail, snow/ice)
- ✓ Flood (coastal, fluvial, pluvial, ground water)

## (2.2.2.14) Partners and stakeholders considered

Select all that apply

- Customers
- ✓ Employees
- Investors
- ✓ Suppliers
- ✓ Regulators

## (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

🗹 No

# (2.2.2.16) Further details of process

Changes and or extreme variability in weather patterns, as well as increases in the frequency of extreme weather events, such as floods, cyclones, hurricanes, drought and forest fires, increases the potential risk for Pembina's assets. These risks include operational disruptions, transportation difficulties, supply chain disruptions, employee safety incidents, and damage to assets, which may result in lower revenue, higher costs or project delays. In response we undertake the following activities: Maintaining policies, procedures and operating guidelines to ensure the safety of our people and assets; Engineering our facilities with specific design considerations to manage weather related risks such as stormwater and forest fires; Identifying, monitoring and mitigating slope, water and seismic threats to our pipeline systems as part of our Geohazard Management Program. All geohazard locations are ranked to define the level and frequency of inspection and monitoring; Implementing Emergency Management Plans to execute timely deployment of equipment, resources and trained personnel to support any kind of incident; Utilizing monitoring technologies for continual evaluation of geohazard risks such as in-line inspections, slope movement and river level monitoring; and Leveraging third party information such as early weather event warning systems, total annual precipitation accumulations, and snowpack levels to provide proactive operational responses. From a physical climate risk perspective, we currently assess the impact of acute physical risks as part of our business interruption and contingent business interruption exposures, largely through asset-specific risk engineering reviews. These asset-specific reviews, offered via a third-party, include site surveys and audits that evaluate the effects of natural hazards, including climate, on our assets as well as risk controls. We couple this external assessment with business unit evaluations to analyze the potential financial and operational impact of physical climate r

# Row 9

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

Local communitiesIndigenous peoples

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

✓ Risks

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

✓ Upstream value chain

✓ Downstream value chain

# (2.2.2.4) Coverage

Select from:

🗹 Full

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

# (2.2.2.9) Time horizons covered

Select all that apply

✓ Medium-term

✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

✓ Site-specific

🗹 Local

## (2.2.2.12) Tools and methods used

#### **Enterprise Risk Management**

✓ Enterprise Risk Management

✓ Risk models

✓ Stress tests

Other

✓ External consultants

# (2.2.2.13) Risk types and criteria considered

#### **Chronic physical**

☑ Changing precipitation patterns and types (rain, hail, snow/ice)

✓ Precipitation or hydrological variability

✓ Temperature variability

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

✓ Customers

✓ Local communities

- ✓ Employees
- Investors
- ✓ Suppliers
- ✓ Regulators

## (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

🗹 No

# (2.2.2.16) Further details of process

Weather conditions can affect the demand for and price of oil, natural gas and NGLs. As a result, changes in weather patterns may affect Pembina's energy transportation and midstream services. Pembina has capacity to handle typical increases in volume of throughput and storage at its facilities to meet changes in seasonal demand. Weather conditions may impact Pembina's ability to complete capital projects, maintenance and integrity projects or facility turnarounds. Unseasonable weather or work required outside of normal construction seasons can result in delays and increased costs. In areas where construction activities can be conducted in non-winter months, Pembina attempts to schedule its construction timetables so as to minimize potential delays due to non-frozen ground conditions and/or adjusting scheduling to accommodate weather conditions. In more severe cases project activities can be suspended until the weather conditions are more favourable or in more extreme cases until the next preferred construction season (i.e. winter to winter). By mitigating the acute physical risks through our programs and operating practices we are also able to reduce the impact of chronic physical risks.

# Row 10

# (2.2.2.1) Environmental issue

Select all that apply

Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

Opportunities

# (2.2.2.3) Value chain stages covered
Select all that apply

✓ Direct operations

☑ Upstream value chain

☑ Downstream value chain

## (2.2.2.4) Coverage

Select from:

🗹 Full

(2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

 $\blacksquare$  More than once a year

# (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

✓ Medium-term

✓ Long-term

# (2.2.2.11) Location-specificity used

Select all that apply

✓ Sub-national

National

(2.2.2.12) Tools and methods used

#### Other

✓ Internal company methods

✓ Partner and stakeholder consultation/analysis

## (2.2.2.14) Partners and stakeholders considered

Select all that apply

Customers

Employees

✓ Investors

✓ Suppliers

✓ Regulators

Local communities

✓ Indigenous peoples

# (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

🗹 No

## (2.2.2.16) Further details of process

We see multiple opportunities that support the transition to a lower carbon economy, which involve investments in businesses, operations or assets relating to renewable or other alternative forms of energy. Our New Ventures Business Unit actively explores new opportunities centered around a lower carbon economy. Included in our evaluation process are: customer interest, alignment with our value chain, technology developments, safety requirements, financial investment required, and potential government incentives and payback. We continue to evaluate our commodity mix to identify opportunities to grow in areas where demand is expected to increase.

## Row 11

## (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

Opportunities

## (2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

(2.2.2.4) Coverage

Select from:

✓ Full

(2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

## (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

## (2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

Medium-term

✓ Long-term

(2.2.2.11) Location-specificity used

#### Select all that apply

#### ✓ Site-specific

Local

#### (2.2.2.12) Tools and methods used

#### Other

- External consultants
- ✓ Internal company methods
- ✓ Partner and stakeholder consultation/analysis

Select all that apply

- ✓ Customers
- ✓ Investors
- ✓ Suppliers
- ✓ Regulators
- ✓ Local communities

Indigenous peoplesOther, please specify: Governments

## (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

# (2.2.2.16) Further details of process

Pembina has many of the core competencies required to adjust to a changing energy mix and is exploring opportunities for new infrastructure services, including carbon transportation and sequestration and new forms of energy including hydrogen. We also view technology as a key contributor to the energy transition and we continue to explore technology associated with Carbon Capture Utilization and Storage, hydrogen, ammonia and solar to effectively manage our emissions and contribute positively to a lower-carbon economy. As part of our investment approach, we work with government and lending partners to access energy transition grants, incentives and financing.

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

✓ Opportunities

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

# (2.2.2.4) Coverage

Select from:

🗹 Full

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

## (2.2.2.8) Frequency of assessment

Select from:

✓ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply

✓ Short-term

✓ Medium-term

✓ Long-term

## (2.2.2.11) Location-specificity used

Select all that apply

✓ Site-specific

# (2.2.2.12) Tools and methods used

Other

☑ Desk-based research

✓ External consultants

✓ Internal company methods

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

✓ Customers

Employees

✓ Investors

✓ Suppliers

✓ Regulators

# (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

🗹 No

(2.2.2.16) Further details of process

Local communitiesIndigenous peoples

In October 2021, Pembina announced its commitment to reduce the Company's GHG emissions intensity by 30% by 2030, relative to 2019 baseline emissions. This GHG reduction target informs business decisions and is intended to improve overall emissions intensity performance, while increasing our long-term value and ensuring Canadian energy is developed and delivered responsibly. To meet this target, we have identified multiple pathways including operational improvements and energy efficiency projects, renewable energy projects, carbon capture and storage and other lower carbon economy investments. Through a lens of continuous improvement, we are taking steps to reduce our carbon intensity while utilizing assets more efficiently. Operational opportunities identified include: Optimizing asset capacity; Constructing cogeneration facilities; Recovering waste heat; Reducing energy consumption; Modernizing and optimizing facilities to reduce the amount of energy consumed; Reducing flaring and venting; and Enhancing leak detection and repair programs at our facilities.

## (2.4) How does your organization define substantive effects on your organization?

## Risks

# (2.4.1) Type of definition

Select all that apply

✓ Qualitative

✓ Quantitative

## (2.4.2) Indicator used to define substantive effect

Select from:

✓ Other, please specify: We consider several factors, which may include impacts on our operations, reputation, financial condition, access to and cost of capital, results of operations, cash flow and dividends. It can also include external reports on macro considerations.

## (2.4.6) Metrics considered in definition

Select all that apply

✓ Frequency of effect occurring

✓ Likelihood of effect occurring

# (2.4.7) Application of definition

Assessments of identified risks and opportunities include the evaluation of potential impacts on our financial results, health, safety, environmental conditions, operating assets and reputation. The associated probabilities are also considered, and those with higher potential financial or strategic impact are prioritized accordingly for investigation, management, mitigation or implementation. Climate change, including the transition to a lower carbon economy, has been identified as

both a key risk and opportunity which has the potential to intensify over time. For additional discussion on potential risks and opportunities that Pembina has identified, please see our Management's Discussions and Analysis and Annual Information Form, each for the year ended December 31, 2023.

## **Opportunities**

# (2.4.1) Type of definition

Select all that apply

Qualitative

✓ Quantitative

## (2.4.2) Indicator used to define substantive effect

Select from:

✓ Other, please specify: We consider several factors, which may include impacts on our operations, reputation, financial condition, access to and cost of capital, results of operations, cash flow and dividends. It can also include external reports on macro considerations.

## (2.4.6) Metrics considered in definition

Select all that apply

✓ Frequency of effect occurring

✓ Likelihood of effect occurring

# (2.4.7) Application of definition

As our corporate strategy demonstrates, Pembina sees great opportunity to continue to invest in, grow, and decarbonize the core business. At the same time, we will capitalize on exciting opportunities to leverage our assets and expertise into new service offerings that proactively respond to the transition to a lower-carbon economy. Assessments of identified risks and opportunities include the evaluation of potential impacts on our financial results, health, safety, environmental conditions, operating assets and reputation. The associated probabilities are also considered, and those with higher potential financial or strategic impact are prioritized accordingly for investigation, management, mitigation or implementation. Climate change, including the transition to a lower carbon economy, has been identified as both a key risk and opportunity which has the potential to intensify over time. For additional discussion on potential risks and opportunities that Pembina has identified, please see our Management's Discussions and Analysis and Annual Information Form, each for the year ended December 31, 2023.

# C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

	Environmental risks identified
Climate change	Select from: Yes, both in direct operations and upstream/downstream value chain

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

## Climate change

# (3.1.1.1) Risk identifier

Select from:

✓ Risk1

## (3.1.1.3) Risk types and primary environmental risk driver

#### Policy

✓ Carbon pricing mechanisms

## (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

## (3.1.1.6) Country/area where the risk occurs

#### (3.1.1.9) Organization-specific description of risk

Federal, provincial, and state governments are supporting the transition to a lower carbon economy by introducing increasingly stringent climate-related laws, regulations and policies. Without appropriate climate-related risk mitigation strategies, Pembina could face increased carbon-related compliance costs, which may impact Pembina's long-term business resilience. For example, in Alberta the TIER regulations came into effect January 1, 2020. The TIER regulation directly applies to several Pembina facilities.

## (3.1.1.11) Primary financial effect of the risk

Select from:

Increased compliance costs

#### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Virtually certain

## (3.1.1.14) Magnitude

Select from:

🗹 Low

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Increased direct costs

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ Yes

## (3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

15600000

## (3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

19500000

## (3.1.1.25) Explanation of financial effect figure

As an estimate for all of our assets, we utilized the facility-specific benchmark methodology which specifies a reduction requirement of 10% below historical levels. Essentially, this dictates that we are required to pay a carbon price on 10% of our Scope 1 emissions. For simplicity, this estimate applies Alberta's TIER Regulations to all of our assets in all jurisdictions and does not account for other facility-specific regulations. We multiplied the 10% reduction requirement by the carbon price in 2023 of 65/tonne CO2e and our 2023 scope 1 emissions. A potential financial impact range has been provided to account for jurisdictional and facility-specific regulations, which provides a reasonable basis to obtain an estimate for 2023.

## (3.1.1.26) Primary response to risk

#### Engagement

✓ Other engagement, please specify: In 2023, Pembina stood up a dedicated GHG and air emissions team that worked with various groups across the organization to optimize our operations. These optimization activities could result in lower emissions across the business.

## (3.1.1.27) Cost of response to risk

1248000

## (3.1.1.28) Explanation of cost calculation

The cost disclosed above equates to the cost of a dedicated GHG and air emissions team (an estimate of time/total compensation). This figure does not reflect capital costs.

## (3.1.1.29) Description of response

The potential financial impacts and costs set out above are estimates only and are based on assumptions and expectations that management believes are reasonable as of the date hereof and are "forward-looking" in nature. Pembina makes no representation that actual results achieved will be the same in whole or in part as those set out in such forward-looking information. See "Forward-Looking Statements" on the first page of this document.

#### Climate change

## (3.1.1.1) Risk identifier

Select from:

✓ Risk2

## (3.1.1.3) Risk types and primary environmental risk driver

#### Policy

☑ Other policy risk, please specify: Enhanced emissions-reporting obligations

#### (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply

Canada

## (3.1.1.9) Organization-specific description of risk

Pembina has operating assets in jurisdictions that have robust reporting obligations and, in most cases, have assets that are regulated at both the federal and provincial levels. For instance, Pembina's Alberta-based facilities fall under TIER Regulations that apply to facilities that emit over 100,000 tonnes of CO2e. In British Columbia, all Pembina assets have a reporting obligation under the Greenhouse Gas Industrial Reporting and Control Act. In addition to these provincial requirements, Pembina also has facilities that are regulated at the federal level in Canada, under the GHG Reporting program requiring any facility emitting over 10,000 tonnes of CO2e per year to report GHG emissions. Emission reporting obligations are subject to change, as a result of change in government and or

regulatory advancements. These changes can result in increased costs due to enhanced data collection requirements, increased time and efforts by employees to understand changing requirements to ensure compliance and potential increases in compliance cost associated with changes in reporting requirements.

## (3.1.1.11) Primary financial effect of the risk

Select from:

Increased direct costs

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Virtually certain

# (3.1.1.14) Magnitude

Select from:

🗹 Low

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Increased direct costs for enhanced emissions-reporting obligations

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

🗹 Yes

(3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

## (3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

2080000

## (3.1.1.25) Explanation of financial effect figure

The financial impact is an estimate of the time/total compensation of those involved in regulatory GHG emissions reporting to government bodies at Pembina in 2023 plus the emissions data management platform capital costs.

## (3.1.1.26) Primary response to risk

#### Infrastructure, technology and spending

✓ Other infrastructure, technology and spending, please specify: To further enhance our emissions data accuracy and provide timely emissions performance reporting, Pembina completed a centralized emission data management program in 2023.

## (3.1.1.27) Cost of response to risk

1600000

## (3.1.1.28) Explanation of cost calculation

The cost disclosed here equates to the cost of sustaining the emissions data management platform and the dedicated team to sustain the platform. This figure does not reflect capital costs.

#### (3.1.1.29) Description of response

The potential financial impacts and costs set out above are estimates only and are based on assumptions and expectations that management believes are reasonable as of the date hereof and are "forward-looking" in nature. Pembina makes no representation that actual results achieved will be the same in whole or in part as those set out in such forward-looking information. See "Forward-Looking Statements" on the first page of this document.

## Climate change

## (3.1.1.1) Risk identifier

#### Select from:

✓ Risk3

## (3.1.1.3) Risk types and primary environmental risk driver

Policy

✓ Carbon pricing mechanisms

## (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

## (3.1.1.6) Country/area where the risk occurs

Select all that apply

🗹 Canada

## (3.1.1.9) Organization-specific description of risk

GHG regulations related to carbon pricing could become increasingly stringent and may expose Pembina to increased costs. As legislated, the federal government's pan-Canadian minimum carbon price will rise by 15 per tonne annually starting in 2023 through to 2030, which may have a significant impact on the Canadian energy industry, including potentially Pembina. Consistent with this increase, the TIER will increase stringency for facility specific benchmarks annually by 2% pursuant to amendments that came into force January 1, 2023.

## (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased direct costs

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Long-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Very likely

## (3.1.1.14) Magnitude

Select from:

✓ Low

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Increased direct costs

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

🗹 Yes

# (3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

6000000

## (3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

80000000

# (3.1.1.25) Explanation of financial effect figure

We calculated this figure by multiplying the federally regulated carbon price (65 per tonne CO2e in 2023 escalating to 170 per tonne CO2e in 2030) and our scope 1 emissions. For Alberta TIER, we applied the 2% tightening of the benchmark. This impact figure is a range of our potential carbon tax in 2030 and does not include customer contributions. Our actual carbon liability will differ from this number as we decarbonize our assets and any potential updates on any emerging carbon regulations.

#### Engagement

✓ Engage with regulators/policy makers

## (3.1.1.27) Cost of response to risk

1500000

## (3.1.1.28) Explanation of cost calculation

The cost disclosed above equates to the cost of a dedicated GHG and air emissions team (an estimate of time/total compensation) including other teams' efforts on advocacy work. This figure does not reflect capital costs.

## (3.1.1.29) Description of response

The potential financial impacts and costs set out above are estimates only and are based on assumptions and expectations that management believes are reasonable as of the date hereof and are "forward-looking" in nature. Pembina makes no representation that actual results achieved will be the same in whole or in part as those set out in such forward-looking information. See "Forward-Looking Statements" on the first page of this document.

## (3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by.

## Alberta TIER - ETS

## (3.5.2.1) % of Scope 1 emissions covered by the ETS

85

## (3.5.2.2) % of Scope 2 emissions covered by the ETS

0

## (3.5.2.3) Period start date

# (3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

2358558

(3.5.2.6) Allowances purchased

46358

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

2404916

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

## (3.5.2.9) Details of ownership

Select from:

✓ Facilities we own and operate

# (3.5.2.10) Comment

Our reporting period for assets under this ETS is for 2023 calendar year. The compliance verification for 2023 reporting year has been completed. Scope 2 emissions are not directly verified under both Alberta TIER.

## (3.5.3) Complete the following table for each of the tax systems you are regulated by.

## BC carbon tax

## (3.5.3.1) Period start date

#### 01/01/2023

## (3.5.3.2) Period end date

12/31/2023

## (3.5.3.3) % of total Scope 1 emissions covered by tax

11.3

(3.5.3.4) Total cost of tax paid

20804458

## (3.5.3.5) Comment

Our reporting period for assets under BC carbon tax is for 2023 calendar year.

## Canada federal fuel charge

# (3.5.3.1) Period start date

01/01/2023

(3.5.3.2) Period end date

12/31/2023

(3.5.3.3) % of total Scope 1 emissions covered by tax

1.4

(3.5.3.4) Total cost of tax paid

## (3.5.3.5) Comment

Our reporting period for assets under Canada federal fuel charge is for 2023 calendar year.

## (3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Pembina operated facilities that are regulated under an emission trading system strive to meet the regulatory performance benchmarks and/or operate as efficiently as possible to mitigate exposure to carbon compliance obligations. When a facility cannot meet carbon performance benchmarks, the facility will utilize project-based or market carbon credits to offset compliance obligations to the extent permitted by regulation or meet obligations through compliance payments, if required. Our approach to improving emissions intensity performance includes our commitment to reduce our GHG emissions intensity 30% by 2030, relative to a 2019 baseline. The target helps guide business decisions that improve overall emissions intensity performance and reduce compliance obligations. There are multiple pathways to achieve our target: Operational opportunities: Optimizing asset capacity and operations Constructing cogeneration facilities Modernizing and optimizing our assets to reduce the amount of energy consumed Enhancing leak detection and repair programs at facilities Reducing flaring and venting Renewable energy: Increasing the use of renewable energy through Power Purchase Agreements ("PPAs) with TransAlta on the 100MW Garden Plain Wind Power Project and with Capstone on the 105MW Wild Rose 2 Wind Farm Exploring other potential small-scale onsite renewable power opportunities Investments in a lower carbon economy: Developing the Alberta Carbon Grid ("ACG") to effectively manage emissions and contribute positively to a lower-carbon economy Evaluating pilot projects for carbon capture and storage at Pembina's gas processing and fractionation facilities

# (3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

	Environmental opportunities identified
Climate change	Select from: ✓ Yes, we have identified opportunities, and some/all are being realized

[Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

**Climate change** 

## (3.6.1.1) Opportunity identifier

Select from:

✓ Opp1

## (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### **Energy source**

✓ Use of renewable energy sources

## (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

## (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

🗹 Canada

## (3.6.1.8) Organization specific description

Pembina views power purchase agreements ("PPA") as an effective tool to support development of renewable energy infrastructure and support the transition to a lower carbon energy system. In May 2022, Pembina entered into a PPA with Capstone Infrastructure to offtake 105 MW of renewable energy and associated renewable attributes over a 15 year period from their 192 MW Wild Rose 2 Wind Farm, which is currently under development. The PPA signals another step forward towards a low-carbon electricity sector in Alberta. The power purchase agreement provides significant benefits to Pembina including generating cost-competitive renewable energy and fixing the price for a portion of the power Pembina consumes. The 105 MW of capacity from the power purchase agreement should provide an estimated 351,750 MWh annually of renewable energy to Alberta's power grid, or enough to power over 42,000 homes for a year. The power purchase agreement is expected to generate on average approximately 141,750 tonnes of CO2e emission offsets annually. Pembina may use these offsets to reduce its own emissions with the option to sell or bank future offsets for other uses.

## (3.6.1.9) Primary financial effect of the opportunity

Select from:

Reduced direct costs

## (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ Virtually certain (99–100%)

# (3.6.1.12) Magnitude

Select from:

✓ Low

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Participation in carbon market

## (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

✓ Yes

## (3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

0

## (3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

15649200

## (3.6.1.23) Explanation of financial effect figures

Pembina may use the offsets to reduce its own emissions and or has the option to sell or bank future offsets for other uses. The maximum financial impact equates to an average 141,750 tonnes of CO2e emission offsets annually multiplied by an average price of 110.40 per offset. This average is based on current and potential ranges of offset prices which can range from 80 to 170.

#### (3.6.1.24) Cost to realize opportunity

3517500

## (3.6.1.25) Explanation of cost calculation

This cost estimate equates to the highest potential cost Pembina could realize and is calculated based on Pembina's average share of power generation at Wild Rose 2 Wind Farm multiplied by the cost of energy. This cost of energy does have a range which starts at 0, however to be conservative we have calculated using the maximum cost.

#### (3.6.1.26) Strategy to realize opportunity

We remain focused on securing renewable energy sources and utilizing PPAs to offset our scope 2 related emissions. Our first PPA, for the offtake of 100 MW of renewable energy power from the Garden Plain Wind Farm, went into commercial operation in August of 2023. The project added 130 MW capacity of wind generation of which Pembina's offtake is 100 MW. The PPA not only provides renewable energy to advance our decarbonization strategy, but also generates carbon offsets that can be utilized for Alberta TIER compliance. In 2023, we earned 87,575 carbon offsets associated with the Garden Plain PPA.

#### Climate change

## (3.6.1.1) Opportunity identifier

Select from:

✓ Opp2

## (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### **Energy source**

✓ Use of renewable energy sources

## (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

#### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

🗹 Canada

## (3.6.1.8) Organization specific description

Pembina views PPAs as an effective tool to support development of renewable energy infrastructure and support the transition to a lower carbon energy system. In 2021, Pembina signed a long-term, 100 megawatt (MW) power purchase agreement with a subsidiary of TransAlta Corporation supporting the development of the 130 MW Garden Plain Wind Project in Alberta, that went into commercial operation in 2023. The power purchase agreement provides significant benefits to Pembina including generating cost-competitive renewable energy and fixing the price for a portion of the power Pembina consumes. The 100 MW of capacity from the power purchase agreement should provide an estimated 335,000 MWh annually of renewable energy to Alberta's power grid, or enough to power over 45,000 homes for a year. The power purchase agreement is expected to generate on average approximately 135,000 tonnes of carbon dioxide equivalent emission ("CO2e") offsets annually. Pembina may use these offsets to reduce its own emissions with the option to sell or bank future offsets for other uses.

## (3.6.1.9) Primary financial effect of the opportunity

Select from:

Reduced direct costs

## (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

Short-term

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ Virtually certain (99–100%)

# (3.6.1.12) Magnitude

Select from:

# (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Participation in carbon market

## (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

✓ Yes

#### (3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

0

## (3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

13824000

## (3.6.1.23) Explanation of financial effect figures

Pembina may use the offsets to reduce its own emissions and or has the option to sell or bank future offsets for other uses. The maximum financial impact equates to an average 135,000 tonnes of CO2e emission offsets annually multiplied by an average price of 102.40 per offset. This average is based on current and potential ranges of offset prices which can range from 65 to 170.

## (3.6.1.24) Cost to realize opportunity

3350000

## (3.6.1.25) Explanation of cost calculation

This cost estimate equates to the highest potential cost Pembina could realize and is calculated based on Pembina's average share of power generation at Garden Plain multiplied by the cost of energy. This cost of energy does have a range which starts at 0, however, to be conservative we have calculated using the maximum cost.

# (3.6.1.26) Strategy to realize opportunity

We remain focused on securing renewable energy sources and utilizing PPAs to offset our scope 2 related emissions. The Garden Plain Wind Farm project added 130 MW capacity of wind generation of which Pembina's offtake is 100 MW. The PPA not only provides renewable energy to advance our decarbonization strategy, but also generates carbon offsets that can be utilized for Alberta TIER compliance. In 2023, we earned 87,575 carbon offsets associated with the Garden Plain PPA.

#### C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

## (4.1.1) Board of directors or equivalent governing body

Select from:

Yes

## (4.1.2) Frequency with which the board or equivalent meets

Select from:

#### Quarterly

#### (4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

Executive directors or equivalent

✓ Independent non-executive directors or equivalent

## (4.1.4) Board diversity and inclusion policy

Select from:

✓ Yes, and it is publicly available

## (4.1.5) Briefly describe what the policy covers

The Board recognizes that diversity among its directors will support balanced decision and debate which, in turn, will enhance decision making by the Board and foster Pembina's commitment to delivering benefits to its four key stakeholder groups – customers, investors, employees and communities – by utilizing the difference in perspective of the members of the Board. In reviewing the composition of the Board, the Governance, Nominating and Corporate Social Responsibility Committee will consider the benefits of diversity in order to maintain an optimum mix of skills, knowledge and experience on the Board. In identifying candidates for appointment as directors, the Board will consider candidates based on merit with regard to the benefits of diversity on the Board, and with a view to the following specific diversity targets: a) the Board should maintain a composition in which each of the female and male genders comprises at least 30% of the independent directors on the Board;

*b) the Board aspires to have at least 40% of the independent directors be individuals that are women, persons with disabilities, indigenous peoples, or members of other racial, ethnic and/or visible minorities.* 

## (4.1.6) Attach the policy (optional)

Question 4.1 Board-Diversity-Policy.pdf

## (4.1.1) Is there board-level oversight of environmental issues within your organization?

	Board-level oversight of this environmental issue
Climate change	Select from:
	✓ Yes

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

## Climate change

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

✓ Chief Executive Officer (CEO)

✓ Board-level committee

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

✓ Yes

## (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

#### (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

✓ Scheduled agenda item in some board meetings – at least annually

#### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ✓ Approving corporate policies and/or commitments
- ☑ Monitoring compliance with corporate policies and/or commitments
- ✓ Overseeing the setting of corporate targets
- ✓ Monitoring progress towards corporate targets
- ✓ Overseeing and guiding the development of a business strategy

# (4.1.2.7) Please explain

Overseeing our sustainability strategy is a core responsibility of the Board. At its annual corporate strategy sessions and quarterly meetings, the Board regularly engages on ESG issues through presentations by management and third-party experts. As part of our annual corporate strategy review, the Board reviews an assessment of energy supply and demand fundamentals. The review includes trends, indicators, and forecasts related to both the global and North American energy markets to identify both risks and opportunities to our business over the short, medium and long term. Additionally, the Board reviews updates to the Company's scenario analysis, which serves as an important input into our strategic planning process. The Board reviews and approves the corporate strategy to ensure we continue to invest in, grow and decarbonize the businesses in alignment with our targets and commitments. While oversight of environmental, social and governance ("ESG") and climate-related issues is ultimately the responsibility of Pembina's Board of Directors ("Board" or "Board of Directors"), the Board has delegated responsibility for oversight of Pembina's ESG strategy to the Governance, Nominating and Corporate Social Responsibility Committee (Governance Committee). The Governance Committee is responsible for Pembina's corporate governance practices; overseeing our ESG strategy, including climate and other material topics, and makes recommendations to the Board on the integration of ESG considerations into long-term business planning, organizational structure and corporate policies and practices; oversees the development of Pembina's sustainability report and facilitates and provides education to the Board, including on ESG matters; reviews ESG matters on a guarterly-basis; and monitors and oversees progress against our emissions reduction target. In 2021, the Board approved Pembina's target for a reduction of emission intensity (30% reduction in GHG emissions intensity of scope 1 and 2 emissions by 2030, based on 2019 baseline emissions). In addition to the Governance Committee, the Safety, Environment and Operational Excellence Committee oversees specific environment and emission-related initiatives and the Human Resources, Health and Compensation Committee is responsible for overseeing ESG integration with employee compensation. The Audit Committee maintains oversight of the integrity of Pembina's financial statements, the reporting process and the internal audit function. The Chief Executive Officer ("CEO") is responsible for providing oversight and coordination of sustainability-related matters and for ensuring timely and effective reporting to the Board and our stakeholders. See the response to 4.3 for additional details.

## (4.2) Does your organization's board have competency on environmental issues?

#### **Climate change**

## (4.2.1) Board-level competency on this environmental issue

Select from:

🗹 Yes

## (4.2.2) Mechanisms to maintain an environmentally competent board

#### Select all that apply

- $\blacksquare$  Consulting regularly with an internal, permanent, subject-expert working group
- ☑ Integrating knowledge of environmental issues into board nominating process
- Z Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)
- $\blacksquare$  Having at least one board member with expertise on this environmental issue

# (4.2.3) Environmental expertise of the board member

Other

☑ Other, please specify: Executive level experience and/or Board experience for a company in an industry exposed to environmental scrutiny

# (4.3) Is there management-level responsibility for environmental issues within your organization?

	Management-level responsibility for this environmental issue
Climate change	Select from:

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

#### **Climate change**

## (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

✓ Chief Sustainability Officer (CSO)

# (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Engagement

- ☑ Managing engagement in landscapes and/or jurisdictions
- ☑ Managing public policy engagement related to environmental issues

#### Policies, commitments, and targets

- ☑ Monitoring compliance with corporate environmental policies and/or commitments
- Measuring progress towards environmental corporate targets
- ☑ Setting corporate environmental policies and/or commitments
- ✓ Setting corporate environmental targets

#### Strategy and financial planning

✓ Developing a climate transition plan environmental issues

- ☑ Managing annual budgets related to environmental issues
- ☑ Implementing the business strategy related to environmental issues
- ☑ Managing major capital and/or operational expenditures relating to

- ☑ Managing environmental reporting, audit, and verification processes
- ☑ Managing acquisitions, mergers, and divestitures related to environmental issues

#### Other

✓ Providing employee incentives related to environmental performance

## (4.3.1.4) Reporting line

#### Select from:

☑ Reports to the Chief Executive Officer (CEO)

#### (4.3.1.5) Frequency of reporting to the board on environmental issues

#### Select from:

✓ Quarterly

## (4.3.1.6) Please explain

The Senior Vice President, External Affairs & Chief Legal and Sustainability Officer is responsible for overseeing Pembina's ESG Strategy, including oversight and monitoring of sustainability issues, risks, trends, and our performance, providing recommendations to the executive team and Board on sustainability matters, updating the Enterprise Risk Committee ("ERC") regarding ESG strategy and risks and is accountable for monitoring and regularly reporting on Pembina's emissions intensity reduction target. The ERC, consisting of senior company officers, meets at least quarterly to review the performance, appropriateness and current business environment surrounding risk management activities. The ERC provides updates to the Board of Directors, outlining risk identification, management and reporting and any deficiencies identified.

## **Climate change**

## (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

✓ Chief Executive Officer (CEO)

#### (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Policies, commitments, and targets

- ☑ Setting corporate environmental policies and/or commitments
- ✓ Setting corporate environmental targets

#### Strategy and financial planning

☑ Implementing the business strategy related to environmental issues

#### Other

✓ Providing employee incentives related to environmental performance

# (4.3.1.4) Reporting line

Select from:

Reports to the board directly

## (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ Quarterly

## (4.3.1.6) Please explain

The CEO is responsible for providing oversight and coordination of climate-related matters and for ensuring timely and effective reporting to the Board and our stakeholders. Specific to climate-related issues, the CEO is responsible for the oversight of our business strategies, including how Pembina will seek to contribute to the development of a lower carbon economy, mitigate the risks associated with climate-related issues and capitalize on potential opportunities.

# Climate change

# (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

✓ Chief Financial Officer (CFO)

## (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Strategy and financial planning

- ✓ Conducting environmental scenario analysis
- ☑ Developing a business strategy which considers environmental issues
- ☑ Implementing the business strategy related to environmental issues
- ☑ Managing annual budgets related to environmental issues
- ☑ Managing major capital and/or operational expenditures relating to environmental issues

#### Other

☑ Providing employee incentives related to environmental performance

# (4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ Quarterly

# (4.3.1.6) Please explain

The CFO is responsible for overall financial stewardship, including assessing climate-related risks and opportunities, financial reporting as well as providing timely, accurate and transparent information to our stakeholders.

## **Climate change**

## (4.3.1.1) Position of individual or committee with responsibility

Executive level

✓ Chief Operating Officer (COO)

## (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Engagement

☑ Managing value chain engagement related to environmental issues

#### Policies, commitments, and targets

- ☑ Monitoring compliance with corporate environmental policies and/or commitments
- ☑ Measuring progress towards environmental corporate targets
- ✓ Setting corporate environmental targets

#### Strategy and financial planning

- ✓ Implementing a climate transition plan
- $\blacksquare$  Managing annual budgets related to environmental issues
- ☑ Implementing the business strategy related to environmental issues
- ☑ Developing a business strategy which considers environmental issues
- ☑ Managing acquisitions, mergers, and divestitures related to environmental issues
- ☑ Managing major capital and/or operational expenditures relating to environmental issues
- Managing priorities related to innovation/low-environmental impact products or services (including R&D)

# (4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

#### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

Quarterly

## (4.3.1.6) Please explain

The COO is responsible for safe and reliable operations, business development and commercial services, operationalizing our ESG objectives, including asset decarbonization and supporting our various Operating Management System ("OMS") strategies and programs. The COO has executive accountability for operational emissions reductions to ensure the assessment, monitoring and management of climate-related issues.

## **Climate change**

## (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

☑ Other C-Suite Officer, please specify: Senior Vice President and Corporate Services Officer

## (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Strategy and financial planning

☑ Implementing the business strategy related to environmental issues
#### Other

✓ Providing employee incentives related to environmental performance

## (4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ Quarterly

### (4.3.1.6) Please explain

Responsible for advancing Pembina's ESG objectives by enhancing organizational culture and equity, diversity and sense of belonging of our employee base, strategic supply chain management and through support of our various OMS strategies and programs.

### **Climate change**

## (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

☑ Other C-Suite Officer, please specify: Senior Vice President and Corporate Development Officer

### (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Strategy and financial planning

☑ Implementing the business strategy related to environmental issues

☑ Managing major capital and/or operational expenditures relating to environmental issues

Managing priorities related to innovation/low-environmental impact products or services (including R&D)

## (4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ Quarterly

## (4.3.1.6) Please explain

Responsible for initiatives associated with extending our value chain and exploration of new opportunities centered around a lower-carbon economy, including new ventures.

### **Climate change**

## (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

☑ Other C-Suite Officer, please specify: Senior Vice President, Marketing & Strategy Officer

## (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Strategy and financial planning

✓ Conducting environmental scenario analysis

- ☑ Developing a business strategy which considers environmental issues
- ✓ Developing a climate transition plan
- ✓ Implementing a climate transition plan
- ☑ Implementing the business strategy related to environmental issues

## (4.3.1.4) Reporting line

Select from: ✓ Reports to the Chief Executive Officer (CEO)

### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ Quarterly

## (4.3.1.6) Please explain

Responsible for overseeing Pembina's strategy development and execution, including the evaluation of enterprise risks and sustainability-related factors, energy management, carbon markets, as well as managing the enterprise transformation portfolio that contributes to our ESG performance.

# (4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

## **Climate change**

## (4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

🗹 Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

## (4.5.3) Please explain

ESG performance continues to be part of our annual corporate short-term incentive compensation ("STIP") for all eligible employees, including safety, GHG emissions and EDI performance. Achieving these metrics alongside other operational, financial and strategic goals impacts annual incentive compensation for all employees. The ESG specific performance categories and key measurers for 2023 include: 17.5% Differentiated Stakeholder Experience includes safety and environment, supplier diversity targets and employee experience; 10% Environmental Leadership includes the sanction and execution of GHG reduction initiatives. Linking compensation to our corporate performance on ESG factors, including our GHG emissions intensity reduction target, aligns with long-term value creation and our stakeholders' interests.

# (4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

### **Climate change**

## (4.5.1.1) Position entitled to monetary incentive

Senior-mid management

✓ Management group

### (4.5.1.2) Incentives

Select all that apply ✓ Bonus - % of salary

### (4.5.1.3) Performance metrics

#### Targets

Progress towards environmental targets

#### **Emission reduction**

☑ Implementation of an emissions reduction initiative

### (4.5.1.4) Incentive plan the incentives are linked to

Select from:

Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

## (4.5.1.5) Further details of incentives

ESG performance continues to be part of our annual corporate short-term incentive compensation ("STIP") for all eligible employees, including safety, GHG emissions and EDI performance. Achieving these metrics alongside other operational, financial and strategic goals impacts annual incentive compensation for all employees. The ESG specific performance categories and key measurers for 2023 include: 17.5% Differentiated Stakeholder Experience includes safety and environment, supplier diversity targets and employee experience; 10% Environmental Leadership includes the sanction and execution of GHG reduction initiatives. Linking compensation to our corporate performance on ESG factors, including our GHG emissions intensity reduction target, aligns with long-term value creation and our stakeholders' interests.

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Short-term incentive targets motivate management to meet annual corporate and individual goals, including non-financial operational and ESG objectives.

## (4.6) Does your organization have an environmental policy that addresses environmental issues?

Does your organization have any environmental policies?
Select from:
✓ Yes

## (4.6.1) Provide details of your environmental policies.

### Row 1

## (4.6.1.1) Environmental issues covered

Select all that apply

✓ Climate change

### (4.6.1.2) Level of coverage

Select from:

✓ Organization-wide

### (4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

✓ Upstream value chain

Downstream value chain

## (4.6.1.4) Explain the coverage

Pembina's Health, Safety & Environment Policy ("HSE") applies to all officers, employees, agents, consultants, contractors, and directors of Pembina. Pembina recognizes the need to engage with its suppliers on climate-related issues. As part of the pre-qualification and renewal process as well as our standard supplier contract, suppliers are asked to maintain a statement of compliance with Pembina's HSE policy. Pembina is committed to protecting the health and safety of workers, the public and safeguarding the environment affected by Pembina's activities. Suppliers are an important extension of Pembina's business and Pembina wants to ensure that suppliers understand what Pembina expects from them with regards to our HSE policy and Supplier Code of Conduct, including climate issues.

## (4.6.1.5) Environmental policy content

#### **Environmental commitments**

Commitment to comply with regulations and mandatory standards

#### Additional references/Descriptions

Description of grievance/whistleblower mechanism to monitor non-compliance with the environmental policy and raise/address/escalate any other greenwashing concerns

## (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ No, and we do not plan to align in the next two years

## (4.6.1.7) Public availability

Select from:

✓ Publicly available

## (4.6.1.8) Attach the policy

Health-Safety-and-Environment-Policy-2023-Final.pdf

## (4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Are you a signatory or member of any environmental collaborative frameworks or initiatives?	
Select from: ☑ No, and we do not plan to within the next two years	

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

# (4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

 $\blacksquare$  Yes, we engaged directly with policy makers

Ves, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

 $\blacksquare$  No, and we do not plan to have one in the next two years

(4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

Yes

(4.11.6) Types of transparency register your organization is registered on

Select all that apply

✓ Mandatory government register

(4.11.7) Disclose the transparency registers on which your organization is registered & the relevant ID numbers for your organization

Government Lobbying Registries: Canada Government Canada (950451-362929), Alberta Government (OL-11001-18) and British Columbia Government (8393-2389)

## (4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

Pembina's External Affairs unit is responsible for ensuring that all engagement with government and public sector stakeholders on matters of legislative, regulatory, or policy development related to climate change is conducted in a manner that is aligned with our approach to responsible operation of our existing assets and investments in the energy transition. We develop robust engagement plans on an annual basis and identify issues upon which we will engage.

# (4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

Row 1

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Alberta's Technology Innovation and Emissions Reduction Regulation (TIER)

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)

✓ Carbon offsets

### (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

✓ Sub-national

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

✓ Other, please specify: Alberta

### (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

Support with minor exceptions

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

Pembina advocated for the existing treatment of carbon credits to be maintained through revision of the TIER regulations. In addition, advocated for longer term price certainty of TIER credits. The development of a competitive decarbonization incentive structure is an important complement to Canada's existing GHG regulatory regime.

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

☑ Ad-hoc meetings

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based regulations for the management and reduction of lifecycle carbon emissions.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

 $\blacksquare$  Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply ✓ Paris Agreement

## Row 2

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Government of Canada's proposed regulatory framework for reducing oil and gas methane emissions to achieve 2030 target.

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

**Environmental impacts and pressures** 

Emissions – methane

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

National

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 Canada

## (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with major exceptions

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

Pembina has advocated for a performance-based policy approach that ensures reduction of methane emissions from the midstream sector is cost effective, promotes innovation, does not undermine competitiveness, and imparts sufficient compliance flexibility for the various obligated parties. Pembina is concerned with stringency and pace of regulations with respect to the midstream sector.

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

✓ Ad-hoc meetings

✓ Submitting written proposals/inquiries

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina has advocated for a performance-based policy approach that ensures reduction of methane emissions from the midstream sector is cost effective, promotes innovation, does not undermine competitiveness, and allows sufficient compliance flexibility for the various obligated parties.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

✓ Paris Agreement

### Row 6

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

British Columbia Output-Based Pricing System

## (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)

✓ Carbon offsets

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

#### ✓ Sub-national

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

✓ Other, please specify: British Columbia

## (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

Support with minor exceptions

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

Pembina is supportive of an incentive-based framework for emissions performance that includes compliance flexibility and does not undermine competitiveness.

### (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- Responding to consultations
- ✓ Submitting written proposals/inquiries

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based regulations for the management and reduction of lifecycle carbon emissions. Pembina shares the government's commitment to reducing emissions in the oil and gas sector through an output-based carbon pricing system. Pembina has advocated for a policy approach that creates economic and regulatory efficiency, as well as reduces complexity and uncertainty that will slow and impede meaningful emissions reductions initiatives planned or already underway. Pembina supports an output-based carbon pricing system across all sectors to encourage investment to a lower carbon economy.

## (4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

✓ Paris Agreement

Row 7

### (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

British Columbia Oil and Gas Regulatory Emissions Cap Policy

## (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

**Environmental impacts and pressures** 

✓ Emissions – CO2

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

✓ Sub-national

## (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

☑ Other, please specify: British Columbia

Select from:

✓ Oppose

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

Pembina is concerned that the Emissions Cap may be redundant or misaligned with other frameworks, creating risk to BC's competitiveness as a jurisdiction for investment for Pembina and our customers.

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- Responding to consultations
- $\blacksquare$  Submitting written proposals/inquiries

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based regulations for the management and reduction of lifecycle carbon emissions. Pembina shares the government's commitment to reducing emissions in the oil and gas sector. Pembina has advocated for a policy approach that creates economic and regulatory efficiency, as well as reduces complexity and uncertainty that will slow and impede meaningful emissions reductions initiatives planned or already underway.

## (4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

# (4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

## Row 8

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Government of Canada's proposed Clean Electricity Regulations

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

#### **Energy and renewables**

✓ Minimum energy efficiency requirements

## (4.11.1.4) Geographic coverage of policy, law, or regulation

#### Select from:

#### National

## (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 Canada

## (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with major exceptions

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

Pembina is supportive of the objectives of the Government of Canada's proposed Clean Electricity Regulations to advance Canadian emissions reductions. However, the pace of decarbonization proposed in the Draft Regulations will put energy reliability and affordability at risk in Western Canada.

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- ✓ Participation in working groups organized by policy makers
- Responding to consultations
- ✓ Submitting written proposals/inquiries

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based regulations for the management and reduction of lifecycle carbon emissions. Pembina shares the government's commitment creating a clean electricity system in Canada, however we need the system to remain affordable and predictable. Pembina has advocated for a policy approach that supports an electricity system that will be dependable and expansive for continued economic growth.

## (4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

 $\checkmark$  Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply ✓ Paris Agreement

## Row 9

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

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

#### Financial mechanisms (e.g., taxes, subsidies, etc.)

- ✓ Subsidies for low-carbon, non-renewable energy projects
- ✓ Subsidies for renewable energy projects
- ✓ Subsidies on infrastructure

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

National

## (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

Canada

## (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with minor exceptions

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

Pembina advocates for broader coverage and consistency across ITCs.

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

Responding to consultations

✓ Submitting written proposals/inquiries

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based regulations for the management and reduction of lifecycle carbon emissions. Pembina has advocated for support from the government through investment tax credits to encourage growth in low carbon and energy transition projects to support mitigation of climate change.

# (4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply ✓ Paris Agreement

## Row 10

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Government of Canada's Regulatory Framework to Cap Oil and Gas Sector Greenhouse Gas Emissions

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

**Environmental impacts and pressures** 

Emissions – CO2

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

National

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 Canada

### (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Oppose

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

Pembina advocated for the federal government to pursue the following instead of a cap on emissions: 1. improve and strengthen the existing economy-wide regulatory regime (i.e., the Output-Based Pricing System), and 2. further incent industrial decarbonization through recapitalization of the Strategic Innovation Fund, increasing funding to the Canada Growth Fund and the Canada Infrastructure Bank, and providing financial support for further reductions in methane emissions. As proposed, the Emissions Cap will lead to unintended consequences for Canada, adversely impacting affordability and jeopardizing domestic and international energy security. The proposed cap also risk impeding domestic decarbonization and Indigenous economic reconciliation by making some projects uneconomic.

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- ✓ Responding to consultations
- ✓ Submitting written proposals/inquiries

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based regulations for the management and reduction of lifecycle carbon emissions. Pembina shares the government's commitment to reducing emissions in the oil and gas sector. Pembina has advocated for a policy approach that creates economic and regulatory efficiency, as well as reduces complexity and uncertainty that will slow and impede meaningful emissions reductions initiatives planned or already underway. Pembina supports emissions reductions across all sectors as the best solution to meet our collective targets.

# (4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

Paris Agreement

## Row 11

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Alberta's Carbon Capture Incentive Program

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

#### Financial mechanisms (e.g., taxes, subsidies, etc.)

✓ Subsidies for low-carbon, non-renewable energy projects

#### (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

✓ Sub-national

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

✓ Other, please specify: Alberta

### (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with minor exceptions

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

Pembina advocates for broader coverage and accelerated payment of grants

### (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

✓ Ad-hoc meetings

 $\blacksquare$  Participation in working groups organized by policy makers

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based

regulations for the management and reduction of lifecycle carbon emissions. Pembina has advocated for support from the government through investment tax credits to encourage growth in low carbon and energy transition projects to support mitigation of climate change.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

✓ Paris Agreement

### Row 12

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

Alberta's Petrochemicals Incentive Program

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)

✓ Subsidies for low-carbon, non-renewable energy projects

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

#### ✓ Sub-national

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

✓ Other, please specify: Alberta

### (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with minor exceptions

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

Pembina advocates for broader coverage and accelerated payment of grants

### (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

☑ Ad-hoc meetings

✓ Participation in working groups organized by policy makers

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based regulations for the management and reduction of lifecycle carbon emissions. Pembina has advocated for support from the government through investment tax credits to encourage growth in low carbon and energy transition projects to support mitigation of climate change.

# (4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

# (4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply ✓ Paris Agreement

### **Row 13**

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Canada Growth Fund

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)

☑ Subsidies for low-carbon, non-renewable energy projects

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

✓ National

## (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 Canada

## (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with no exceptions

### (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

✓ Ad-hoc meetings

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for support from the government through carbon contracts for difference to encourage growth in low carbon and energy transition projects to support mitigation of climate change.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

 $\checkmark$  Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply ✓ Paris Agreement

Row 14

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

Canada Strategic Innovation Fund

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)

☑ Subsidies for low-carbon, non-renewable energy projects

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

✓ National

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 Canada

## (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with no exceptions

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

✓ Ad-hoc meetings

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based

regulations for the management and reduction of lifecycle carbon emissions. Pembina has advocated for support from the government through investment tax credits to encourage growth in low carbon and energy transition projects to support mitigation of climate change.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

✓ Paris Agreement

### Row 19

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

Government of Canada Impact Assessment Act

## (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

#### Other

☑ Other, please specify: Regulations for the development of projects - environmental considerations included in the Act

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 Canada

## (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with minor exceptions

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

Pembina is supportive of the objectives the Impact Assessment Act and process. Pembina worked with the Impact Assessment Agency and federal government to understand the process for developing a liquified natural gas project, as directed by the regulations. Pembina advocates for certainty and support from the federal government to develop projects within this jurisdiction.

### (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

✓ Regular meetings

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for support from the government through regulatory certainty and expedited development approvals that economically support Canada while continuing to transition to a low carbon environment.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

# (4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply ✓ Paris Agreement

### **Row 20**

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

British Columbia Net-Zero New Industry Policy for LNG

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Environmental impacts and pressures

Emissions – CO2

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

✓ Sub-national

## (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

✓ Other, please specify: British Columbia

### (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

Support with minor exceptions

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

Pembina is supportive of the objectives the Net-Zero New Industry Policy for LNG. Pembina worked with British Columbia government to understand the process for developing a liquified natural gas project, as it pertains to this policy. Pembina advocates for certainty and support from the British Columbia government to develop projects within this jurisdiction.

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

Regular meetings

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory certainty and expedited development approvals for projects that support British Columbia's transition to a clean economy.

# (4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

✓ Paris Agreement

Row 22

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Government of Canada Hydrogen Strategy

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

#### Energy and renewables

✓ Alternative fuels

✓ Low-carbon, non-renewable energy generation

☑ Other energy and renewables, please specify: Hydrogen, methanol and ammonia

### (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

✓ National

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

🗹 Canada

## (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with no exceptions

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

#### ✓ Ad-hoc meetings

- ✓ Participation in working groups organized by policy makers
- Responding to consultations
- ✓ Submitting written proposals/inquiries

# (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Pembina understands the complexity of transitioning to a lower carbon economy and addressing the risks associated with climate change, while at the same time continuing to provide reliable, secure energy to global markets. Pembina has advocated for regulatory frameworks that support effective and outcome-based regulations for the management and reduction of lifecycle carbon emissions. Pembina has advocated for support from the government through regulatory certainty to encourage development of low carbon ammonia, hydrogen and methanol projects.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

 $\checkmark$  Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply ✓ Paris Agreement

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

## (4.11.2.1) Type of indirect engagement

#### Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Canadian Propane Association

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

✓ Mixed

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Canadian Propane Association (CPA) is the national association for Canada's propane industry, dedicated to promoting propane as an essential, clean and reliable energy solution. CPA works with governments and regulators on policy issues that have ramifications for the propane industry in Canada. Pembina participates in and supports CPA's advocacy work on issues of relevance to Pembina. The company is represented on CPA's board of directors and on CPA committees.

## (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

#### Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 2

## (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Alberta Industrial Heartland Association

# (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

#### ✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

#### Consistent

# (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, we publicly promoted their current position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Alberta Industrial Heartland Association (AIHA) is a municipal economic development partnership that encourages sustainable industrial development in the northeast Edmonton capital region. AIHA seeks to position itself as a globally recognized, diversified, eco-industrial cluster, with a world-leading hydrocarbon processing industry, that sets the global standard for industrial ESG leadership. The organization promotes low-carbon industrial growth opportunities based on access to two large carbon capture and storage, and two hydrogen infrastructure systems positioned within the industrial region. AIHA acknowledges the important role heavy industry must play in helping Canada achieve its net-zero aspirations and is consistently seeking opportunities to partner with industry and government to reduce the region's overall climate impact. Based on expertise from industrial operators active within the region, AIHA regularly works with all three levels of government to ensure a healthy policy, program, regulatory, and legislative environment for a competitive framework for industry to grow, innovate, and pursue carbon reduction opportunities.

## (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply ✓ Paris Agreement

Row 3
# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

### (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Northeast Capital Industrial Association

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

#### Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Northeast Capital Industrial Association (NCIA) is an Alberta-based association that seeks to promote sustainable industrial growth through environmental, socioeconomic, and public safety programs. The NCIA represents the interests of industry in Alberta's Industrial Heartland area and works with government organizations and community groups at the provincial, regional, and local levels to address environmental, health, safety, infrastructure, and community issues. Pembina participates in and supports the NCIA's advocacy work on issues of relevance to the company, including issues related to climate policies. A representative of Pembina is currently on the Executive Committee and we participate on the Environment Committee.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

### Row 4

## (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

### (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Strathcona Industrial Association

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

## (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Strathcona Industrial Association (SIA) is an industry association representing east Edmonton and Strathcona County heavy industrial operators in Alberta, that provides a common voice for industry. SIA members share a commitment to safe and environmentally responsible operations. By consistently monitoring and measuring performance, the SIA assesses the effects of industry and gathers scientifically valid data about current local air quality and long-term trends. This information is shared through ongoing reporting to Alberta Environment and Parks. Pembina has representatives on the Board of Directors and the Environment Committee of the SIA. Pembina supports SIA's work on advancement in the areas of environmental monitoring, including current local air quality and long-term trends, performance, safety promotion, public engagement and community well-being.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

✓ Paris Agreement

Row 5

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

### (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Business Council of Alberta

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

#### Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

✓ Mixed

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Business Council of Alberta (BCA) is supportive of government's climate ambitions but stresses that actions in support of emissions reductions best utilize Alberta's industrial strengths. The BCA is also supportive of action that increases the workforce necessary in Alberta to meet the needs of the energy transition.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

#### Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

### Row 6

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

# (4.11.2.4) Trade association

### **North America**

☑ Other trade association in North America, please specify: Alberta Chamber of Resources

# (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

### ✓ Climate change

# (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

# (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Alberta Chamber of Resources (ACR) provides cross-sectoral perspectives and leadership on resource opportunities and challenges in Alberta's resource sector. ACR members are resource companies, transportation, logistics companies, engineers, and others who work in the resource-extraction industry in Alberta. Their core focus areas are enabling policy and regulatory support, resource industry of the future, Indigenous engagement and partnerships, ESG standards and expectations, and workforce. Pembina participates on the Indigenous engagement and responsible development committee.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

✓ Paris Agreement

Row 7

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: North Dakota Petroleum Council

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The North Dakota Petroleum Council (NDPC) recognizes the challenge of climate change and the energy transitions and advocates to ensure that energy remains affordable and secure through the transition.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

# (4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply ✓ Paris Agreement

Row 8

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

### (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Resource Diversification Council

# (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

## (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

#### Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

#### Select from:

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Resource Diversification Council (RDC) recognizes the immense potential for Alberta's workforce and natural resources to be used to grow the petrochemical industry and support the global energy transition. Pembina supports advocacy by the RDC on issues of relevance to Pembina and is currently on the Board of Directors.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

 $\blacksquare$  Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

✓ Paris Agreement

### Row 9

## (4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### North America

☑ Other trade association in North America, please specify: Western Canadian Shipper's Coalition

# (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

## (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Western Canadian Shipper's Coalition (WCSC) represents western shippers who provide tens of thousands of direct and indirect jobs for Canadians in communities across the west and ship billions of dollars' worth of mainly resource products annually to domestic and international customers. Pembina participates in and supports WCSC's advocacy work on issues of relevance to Pembina and participates in WCSC committees.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

 ${\bf V}$  Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

### ✓ Paris Agreement

## Row 10

(4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: BC Marine Terminal Operators Association

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The BC Marine Terminal Operators Association is the voice of marine terminals in British Columbia. The association is dedicated to the safe, environmentally responsible, cost-effective, efficient and reliable movement of goods through B.C. ports. The association invests in the community and to protect the industrial shoreline. They also advocate for responsible growth, balanced investment, and forward-thinking policy. Pembina participates in and supports the BC Marine Terminal Operators Association's advocacy work on issues of relevance to Pembina and participates in committees. A representative of Pembina is currently a member on the board of directors.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 11

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

# (4.11.2.4) Trade association

### **North America**

☑ Other trade association in North America, please specify: Business Council of British Columbia

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

### (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Mixed

# (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Business Council of British Columbia (BCBC) is a non-partisan organization dedicated to promoting prosperity for current and future generations. Comprised of over 200 leading B.C. companies, post-secondary institutions and industry associations, BCBC provides credible information, fosters cross-sectoral relationships and advocates for bold and practical solutions to the policy challenges of our time. Pembina supports advocacy by the BCBC on issues of relevance to Pembina

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 12

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

### (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Calgary Chamber of Commerce

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

#### Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Calgary Chamber of Commerce exists to help businesses reach their potential. As an independent, non-profit, non-partisan organization founded in 1891, they build on history to serve and advocate for businesses of all sizes, in all sectors across the city. Pembina supports advocacy by the Calgary Chamber of Commerce on issues of relevance to Pembina.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

#### Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 13

## (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

# (4.11.2.4) Trade association

### **North America**

☑ Other trade association in North America, please specify: Resource Works

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

# (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Resource Works is a public-interest advocacy and communications not-for-profit based in Vancouver, British Columbia. Their mission is to reignite the promise of Canada's economic future by leading respectful, inclusive and fact-based dialogue on natural resource development. Their work helps show how resources have "worked" for citizens in the past and how they can continue to do so in a new climate defined by environmental responsibility and reconciliation. They communicate the importance of resource sectors to personal well-being and opportunity, demonstrating how responsible development creates jobs and incomes, both directly and indirectly, while maintaining a clean and healthy environment. Pembina supports advocacy by the Resource Works on issues of relevance to Pembina.

# (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

✓ Paris Agreement

**Row 14** 

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

### (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Public Policy Forum

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

#### Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Public Policy Forum (PPF) was born out of the belief that dialogue between leaders in the private and public sectors leads to better policy. Established in 1987, PPF created an independent space for leaders to meet regularly to discuss governance and public policy in Canada. Pembina supports advocacy by the PPF on issues of relevance to Pembina.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

#### Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

## Row 15

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

# (4.11.2.4) Trade association

### **North America**

☑ Other trade association in North America, please specify: Energy Connections Canada

# (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

### ✓ Climate change

# (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

### Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Energy Connections Canada (ECC) harnesses the collective wisdom and energy of all aspects of the energy transmission chain. ECC members work together to share ideas, develop solutions, promote research and advocate to advance safety, reliability, efficiency, technology and environmental protection. Pembina supports advocacy by the ECC on issues of relevance to Pembina and is currently a member of the Board of Directors.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

✓ Paris Agreement

# Row 16

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: ISC3

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Industry Steering Committee on Climate Change (ISC3) is an organization of various energy, manufacturing, electricity and business associations from across Canada who work together and advocate for policies that benefit the economic development of Canadian industries while recognizing the importance of climate change to Canadians. Pembina supports advocacy by the ISC3 on issues of relevance to Pembina.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

#### Select from:

### ✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

# Row 18

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

## (4.11.2.4) Trade association

### **North America**

☑ Other trade association in North America, please specify: National Maritime Group

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

☑ No, we did not attempt to influence their position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The National Maritime Group represents nearly 100 private sector maritime employers and operators from coast to coast and through the St. Lawrence, moving essential goods and providing well-paying family-supporting jobs in 14 Canadian ports across five provinces. Pembina supports the advocacy by the National Maritime Group on issues of relevance to Pembina and is a member of the Board of Directors.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

✓ Paris Agreement

## Row 19

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

# (4.11.2.4) Trade association

### **North America**

☑ Other trade association in North America, please specify: North Saskatchewan River Watershed Alliance

# (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

## (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The North Saskatchewan Watershed Alliance began over twenty years ago to provide leadership in watershed planning, promote watershed knowledge sharing and support collaborative The North Saskatchewan Watershed Alliance began over twenty years ago to provide leadership in watershed planning, promote watershed knowledge sharing and support collaborative partnerships. Pembina supports the advocacy by the North Saskatchewan Watershed Alliance of the Board of Directors. Pembina supports the advocacy by the North Saskatchewan Watershed of Directors.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

## Row 20

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

### **North America**

☑ Other trade association in North America, please specify: Athabasca Watershed Council

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Athabasca Watershed Council (AWC) is a registered charity and not-for-profit organization formed in August, 2009. They work with academia, industry, environmental and stewardship groups, various levels of government, communities, citizens, and Indigenous peoples to provide timely and credible information about the Athabasca River watershed. Pembina supports the advocacy of the AWC on issues of relevance to Pembina.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

✓ Paris Agreement

Row 21

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

# (4.11.2.4) Trade association

### North America

☑ Other trade association in North America, please specify: Heartland Air Monitoring Partnership

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

✓ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The Heartland Air Monitoring Partnership (HAMP) monitors the air people breathe within a 4,500 square kilometer area located immediately north and east of Edmonton. With Alberta's Industrial Heartland within the borders of the HAMP, the HAMP collects and reports on air quality data in a region with some of the most condensed industrial development in the province. Pembina supports the advocacy of the HAMP on issues of relevance to Pembina and is a member of the Technical Working Group.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

 $\checkmark$  Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

✓ Paris Agreement

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

# (4.12.1.1) Publication

Select from:

✓ In mainstream reports

## (4.12.1.3) Environmental issues covered in publication

Select all that apply

✓ Climate change

## (4.12.1.4) Status of the publication

Select from:

✓ Complete

# (4.12.1.5) Content elements

Select all that apply

✓ Governance

☑ Risks & Opportunities

✓ Strategy

Emission targets

## (4.12.1.6) Page/section reference

Pages 2-4, 35-40, 47, 54, 63-65

## (4.12.1.7) Attach the relevant publication

2024-Information-Circular-(enhanced)-(Website)-Final.pdf

### Row 2

# (4.12.1.1) Publication

Select from:

✓ In voluntary communications

## (4.12.1.3) Environmental issues covered in publication

Select all that apply

✓ Climate change

# (4.12.1.4) Status of the publication

Select from:

✓ Complete

# (4.12.1.5) Content elements

Select all that apply

✓ Risks & Opportunities

✓ Strategy

Emission targets

# (4.12.1.6) Page/section reference

Pages 2-9

# (4.12.1.7) Attach the relevant publication

AnnualSummary2023.pdf

# (4.12.1.1) Publication

Select from:

✓ In voluntary sustainability reports

# (4.12.1.3) Environmental issues covered in publication

Select all that apply

✓ Climate change

# (4.12.1.4) Status of the publication

Select from:

✓ Complete

# (4.12.1.5) Content elements

Select all that apply

✓ Strategy

✓ Governance

Emission targets

✓ Emissions figures

✓ Risks & Opportunities

# (4.12.1.6) Page/section reference

Introduction, Governance, Energy Transition & Climate and Data Tables & Appendices

## (4.12.1.7) Attach the relevant publication

2023-Sustainability-Report.pdf

✓ Value chain engagement

# (4.12.1.1) Publication

Select from:

✓ In other regulatory filings

# (4.12.1.3) Environmental issues covered in publication

Select all that apply

✓ Climate change

# (4.12.1.4) Status of the publication

Select from:

✓ Complete

# (4.12.1.5) Content elements

Select all that apply

✓ Content of environmental policies

✓ Governance

✓ Risks & Opportunities

✓ Strategy

# (4.12.1.6) Page/section reference

Description of Pembina's Business and Operations, Other Information Relating to Pembina's Business, Risk Factors

# (4.12.1.7) Attach the relevant publication

AIF-PPC-Q4-2023-FINAL.pdf

## C5. Business strategy

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

## **Climate change**

(5.1.1) Use of scenario analysis

Select from:

🗹 Yes

(5.1.2) Frequency of analysis

Select from:

✓ Annually

(5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

## Climate change

### (5.1.1.1) Scenario used

### Climate transition scenarios

✓ IEA STEPS (previously IEA NPS)

# (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

# (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

See IEA STEPS

### (5.1.1.11) Rationale for choice of scenario

Our scenarios address two distinct horizons to evaluate our strategy to ensure that it thrives through 2030 and allows us to look beyond to 2050. These scenarios enable us to think strategically about our business and ensure our strategy is resilient under a wide range of decarbonization pathways, recognizing that none of the scenarios are forecasts or predictions. Our strategic priorities include a focus on environmental leadership to sustain, decarbonize, and enhance our business while investing in energy transition and transforming and exporting our products to global markets where demand is expected to increase. In late 2023, we refreshed our scenario analysis based on the IEA World Energy Outlook 2023 and insights into North American and global energy supply and demand under these scenarios. We again considered the pace of decarbonization and global market integration. Global market integration considered the Canadian energy sector, and specifically the Western Canadian Sedimentary Basin, in the context of global supply and demand projections for crude oil, NGLs and natural gas and the impact of climate policies in Canada and in various jurisdictions around the world. In updating our scenarios, we aligned our outlook with the updated IEA scenarios across crude oil and natural gas future energy projections.

### **Climate change**

### (5.1.1.1) Scenario used

Climate transition scenarios ✓ IEA APS

## (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

### (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

#### See IEA APS

### (5.1.1.11) Rationale for choice of scenario

Our scenarios address two distinct horizons to evaluate our strategy to ensure that it thrives through 2030 and allows us to look beyond to 2050. These scenarios enable us to think strategically about our business and ensure our strategy is resilient under a wide range of decarbonization pathways, recognizing that none of the scenarios are forecasts or predictions. Our strategic priorities include a focus on environmental leadership to sustain, decarbonize, and enhance our business while investing in energy transition and transforming and exporting our products to global markets where demand is expected to increase. In late 2023, we refreshed our scenario analysis based on the IEA World Energy Outlook 2023 and insights into North American and global energy supply and demand under these scenarios. We again considered the pace of decarbonization and global market integration. Global market integration considered the Canadian energy sector, and specifically the Western Canadian Sedimentary Basin, in the context of global supply and demand projections for crude oil, NGLs and natural gas and the impact of climate policies in Canada and in various jurisdictions around the world. In updating our scenarios, we aligned our outlook with the updated IEA scenarios across crude oil and natural gas future energy projections.

## (5.1.2) Provide details of the outcomes of your organization's scenario analysis.

### **Climate change**

# (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- ☑ Risk and opportunities identification, assessment and management
- ✓ Strategy and financial planning
- ☑ Resilience of business model and strategy
- ✓ Other, please specify: Capital allocation

# (5.1.2.2) Coverage of analysis

Select from:

✓ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

In 2022, through a year-long detailed undertaking, Pembina's business was reviewed and analyzed on a commodity-by-commodity basis, incorporating a scenariobased planning exercise grounded in the two key themes that could most impact the energy sector: decarbonization and globalization. Using a differentiated pace of decarbonization grounded in scenarios published by the International Energy Agency and layering in varying degrees of Canadian integration into global markets, allowed a thorough assessment of our business resiliency against four potential future outcomes resulting in a refined strategy that is intended to meet performance aspirations in a broad range of scenarios. This strategy was approved by the Board with the goal of enabling Pembina to deliver value to its stakeholders well into the future. Pembina will build on its strengths by continuing to invest in and grow our core businesses that provide critical transportation and midstream services to help ensure reliable, responsibly produced and secure energy supply. We will also capitalize on exciting opportunities to leverage our assets and expertise into new service offerings that enable the transition to a lower-carbon economy. In continuing to meet global energy demand and our customers' needs, while striving to ensure Pembina's long-term success and resilience, the company has established four strategic priorities: 1) We will focus on strengthening and growing our existing franchise and demonstrating environmental leadership. 2) We will expand our portfolio to include new businesses associated with lower-carbon commodities. 3) We will continue our focus on supporting the transformation of Western Canadian Sedimentary Basin commodities into higher margin products and enabling more coastal egress. 4) We remain committed to delivering excellence for our four key stakeholder groups meaning that: Employees say we are the 'employer of choice' and value our safe, respectful, collaborative, and inclusive work culture. Communities welcome us and recognize the net positive impact of our social and environmental commitment. Customers choose us first for reliable and value-added services. Investors receive sustainable industry-leading total returns. In late 2023, we refreshed our scenario analysis based on the IEA World Energy Outlook 2023 and insights into North American and global energy supply and demand under these scenarios. We again considered the pace of decarbonization and global market integration. Global market integration considered the Canadian energy sector, and specifically the Western Canadian Sedimentary Basin, in the context of global supply and demand projections for crude oil, NGLs and natural gas and the impact of climate policies in Canada and in various jurisdictions around the world. In updating our scenarios, we aligned our outlook with the updated IEA scenarios across crude oil and natural gas future energy projections. Under all scenarios, our long-term corporate strategy remains resilient and we are committed to environmental leadership through making our core business more resilient and developing energy transition and export projects.

## (5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

## (5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

✓ Yes, both strategy and financial planning

## (5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

Products and services

- ✓ Upstream/downstream value chain
- ✓ Investment in R&D
- ✓ Operations

# (5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

### **Products and services**

# (5.3.1.1) Effect type

Select all that apply

✓ Risks

Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

## (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Pembina has an established New Ventures Business Unit which is actively exploring new opportunities centered around a lower carbon economy. Responsibilities of our Senior Vice President and Corporate Development Officer now include exploration of new opportunities centered around a lower carbon economy. Included in our evaluation process are: customer interest, alignment with our value chain, technology developments, safety requirements, financial investment required, and potential government incentives and payback. Cedar LNG is a partnership between Pembina and the Haisla Nation to develop a floating LNG facility in Kitimat, British Columbia, within the traditional territory of the Haisla Nation. The project is strategically positioned to leverage Canada's abundant natural gas supply and British Columbia's growing LNG infrastructure to produce industry-leading, low-carbon, cost-competitive Canadian LNG for overseas markets. Cedar LNG is the world's first Indigenous majority-owned LNG project, will provide unprecedented opportunities for both the Haisla Nation and the region. Powered by clean, renewable energy from BC Hydro, Cedar LNG is expected to produce 0.08 tonnes CO2e per tonne LNG, considerably less than other proposed LNG facilities as of the date hereof and well below the global average of 0.35 tonnes CO2 e per tonne LNG. Cedar LNG could result in a reduction of between 6 to 14 Mt CO2 e/year if this LNG displaces coal, on a lifecycle basis. Throughout 2023, Cedar LNG received all material regulatory approvals, including receiving an Environmental Assessment Certificate from the British Columbia government, a positive Decision Statement from the federal Minister of Environment and Climate Change, and a pipeline permit for the Cedar LNG Pipeline connection to Coastal Gas Link, as well as an LNG Facility Permit from the BC Energy Regulator. On June 25, 2024, the Haisla Nation and Pembina announced a positive Final Investment Decision (FID") on the Cedar LNG Project. The Alberta Carbon Grid ("ACG") is a carbon transportation and sequestration solution being designed to serve multiple customers, industries, and sectors. A partnership between Pembina and TC Energy, ACG is focused on providing openaccess carbon dioxide ("CO2 ") transportation and sequestration solutions across Alberta. ACG is exploring the development of the Industrial Heartland project, which will be developed in phases with the potential capability of transporting and storing up to 10 million tonnes of CO2 annually when fully developed. This project has been selected by the Government of Alberta to further evaluate the proposed location for safely storing carbon. ACG completed the appraisal well drilling, logging and testing in December 2023. Preliminary data was consistent with the storage capacity expectations and further work is underway to confirm the initial results.

### Upstream/downstream value chain

## (5.3.1.1) Effect type

Select all that apply

🗹 Risks

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

## (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Pembina has implemented a Supplier Code of Conduct as part of our supplier on-boarding and compliance program. Included in this code are details of Pembina's environmental stewardship commitments. Suppliers are now also asked to provide ESG information, documenting their position on various ESG topics important to Pembina, including climate-related issues.

### Investment in R&D

# (5.3.1.1) Effect type

Select all that apply

✓ Opportunities

# (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

## (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Pembina sees value in advancing new technologies which could have a positive impact on climate-related issues. As discussed above the New Ventures Business Unit is actively exploring new technologies centered around a lower carbon economy. Pembina has many of the core competencies required to adjust to a changing energy mix and is positioned to provide infrastructure services for new forms of energy including energy produced from hydrogen and carbon sequestration. Pembina
has partnered with TC Energy to jointly develop a carbon transportation and sequestration system the ACG. ACG is exploring the development of the Industrial Heartland project, which will be developed in phases with the potential capability of transporting and storing up to 10 million tonnes of CO2 annually when fully developed. This project has been selected by the Government of Alberta to further evaluate the proposed location for safely storing carbon. ACG completed the appraisal well drilling logging and testing in December 2023. Preliminary data was consistent with the storage capacity expectations and further work is underway to confirm the initial results. As part of our longstanding partnership with the Alberta Industrial Heartland we have announced ongoing efforts to establish a new growth platform known as the Pembina Low Carbon Complex ("PLCC"). With over 2000 contiguous acres of undeveloped land our vision is to develop an industrial complex for low-carbon energy infrastructure to better enable Pembina and third parties to develop projects while seeking to reduce costs, emissions and risk. The PLCC will focus on attracting and developing investment in innovative and emerging energy transition technologies and sustainable fuels and chemicals specifically low-carbon hydrogen and hydrogen carriers such as ammonia and methanol. Within the PLCC Pembina would lease land to third parties and provide infrastructure logistics and shared services to tenants depending on their needs under typical midstream commercial models. Pembina aconsider direct investments in these projects. Another way Pembina is approaching energy transition is through financing strategic investments. In 2023, Pembina committed to a 25 million investment over multiple years with Energy Impact Partners LP ("EIP") a global investment firm focused on energy transition investments. EIP brings together entrepreneurs and energy and industrial companies to advance innovation in decarbonization technologies. The investment with EIP offers Pembin

# Operations

# (5.3.1.1) Effect type

Select all that apply

✓ Risks

Opportunities

#### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

# (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

In October 2021 Pembina announced its commitment to reduce the Company's GHG emissions intensity by 30 by 2030 relative to 2019 baseline emissions. This GHG reduction target is intended to help guide business decisions and improve overall emissions intensity performance while increasing Pembina's long-term value and ensuring Canadian energy is developed and delivered responsibly. To meet this target Pembina has identified multiple pathways including operational opportunities renewable energy projects and lower carbon economy investments. Through a lens of continuous improvement Pembina is taking further steps to reduce our environmental footprint while utilizing assets more efficiently. Operational contributions identified include optimizing asset capacity and operations constructing cogeneration facilities for example our Empress cogeneration facility modernizing and optimizing assets to reduce the amount of energy consumed reducing flaring and venting and enhancing leak detection and repair programs at our facilities. In 2023 the following contributed to our emissions reduction: Full year

operations of the Empress Cogeneration facility; Equipment and heat piping optimizations; Redundant equipment shut-ins and fugitive emissions reductions through new integrated identification maintenance and repair practices.

# (5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

#### Row 1

#### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

Revenues

### (5.3.2.2) Effect type

Select all that apply

✓ Risks

Opportunities

# (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

✓ Climate change

# (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

It is possible that lower demand, leading to lower prices for oil, natural gas and NGL's may be driven by changing consumer preferences, new technologies or a rapid transition to other forms of energy. This could impact Pembina's customers and lead to less demand for Pembina's current services, potentially negatively impacting our revenue. As discussed above, the New Ventures Business Unit is actively exploring new opportunities centered around a lower carbon economy. For example Cedar LNG is a partnership between Pembina and the Haisla Nation to develop a floating LNG facility in Kitimat British Columbia within the traditional territory of the Haisla Nation. The project is strategically positioned to leverage Canada's abundant natural gas supply and British Columbia's growing LNG infrastructure to produce industry-leading, low-carbon, cost-competitive Canadian LNG for overseas markets. Cedar LNG is the world's first Indigenous majority-owned LNG project, will provide unprecedented opportunities for both the Haisla Nation and the region. Powered by clean, renewable energy from BC Hydro, Cedar LNG is expected to produce 0.08 tonnes CO2 e per tonne LNG, considerably less than other proposed LNG facilities as of the date hereof and well below the global average of 0.35

tonnes CO2 e per tonne LNG. Cedar LNG could result in a reduction of between 6 to 14 Mt CO2 e/year if this LNG displaces coal, on a lifecycle basis. Pembina has many of the core competencies required to adjust to a changing energy mix and is positioned to provide infrastructure services for new forms of energy, including energy produced from hydrogen and carbon sequestration, while continuing to deliver low-cost energy solutions to existing customers and markets. Throughout 2023 Cedar LNG received all material regulatory approvals including receiving an Environmental Assessment Certificate from the British Columbia government a positive Decision Statement from the federal Minister of Environment and Climate Change and a pipeline permit for the Cedar LNG Pipeline connection to Coastal Gas Link as well as an LNG Facility Permit from the BC Energy Regulator On June 25 2024 the Haisla Nation and Pembina announced a positive Final Investment Decision FID on the Cedar LNG Project. Other examples include ACG and PLCC.

#### Row 2

#### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

✓ Direct costs

# (5.3.2.2) Effect type

Select all that apply

✓ Risks

✓ Opportunities

# (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

✓ Climate change

# (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

The costs associated with measurement, monitoring, reporting, compliance and technology are included as direct costs to Pembina. These costs are included in the budgeting and financial planning process. Power required to operate Pembina's assets are included in the calculation of operating costs. Pembina considers power as an opportunity to reduce its emissions as it considers generating its own electricity and using the waste heat through co-generation facilities and or through the purchase of renewable electricity. For example, following our first PPA for the offtake of 100 MW of renewable energy power from the Garden Plains Wind Farm in 2021, we signed a second agreement with a wholly owned subsidiary of Capstone Infrastructure Corporation for the offtake of 105 MW from the Wild Rose 2 Wind Farm in 2022. This power purchase agreement generates cost-competitive renewable energy and is an effective tool to support development of renewable energy infrastructure, lower emissions, and support the transition to a lower carbon energy system.

# (5.3.2.1) Financial planning elements that have been affected

Select all that apply

✓ Capital allocation

#### (5.3.2.2) Effect type

Select all that apply

🗹 Risks

✓ Opportunities

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

✓ Climate change

## (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

Pembina follows an established governance framework to guide capital project decision making - the Project Delivery and Governance Lifecycle Framework. This framework supports project identification, evaluation and selection in alignment with our corporate strategy and key stakeholder interests. The framework ensures that capital investments are subject to a risk-based and standardized set of project planning and management review requirements, emphasizing health and safety, environmental protection, Indigenous and community engagement, regulatory compliance and consideration of our commitments to reduce GHG emissions. Major capital projects that qualify under this framework require executive team review and endorsement at regularly scheduled Investment Committee Meetings (ICM) before approval is granted to proceed to the next stage of development.

#### Row 4

#### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

✓ Acquisitions and divestments

# (5.3.2.2) Effect type

Select all that apply

✓ Risks

Opportunities

# (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

✓ Climate change

# (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

ESG and the transition to a lower carbon economy have become an increased focus on our investment decisions as we continue to progress towards our 2030 emission reduction target and is an additional lens through which all acquisitions and divestments are evaluated by Pembina's Investment Committee and our Board of Directors. On August 15, 2022, Pembina completed a joint venture transaction with KKR & Co. to combine their respective Western Canadian natural gas processing assets into a single, new joint venture entity, Pembina Gas Infrastructure Inc. (PGI). The creation of PGI is a natural next step that will allow for efficiencies, cost reduction, unlock growth and provide increased service offerings to customers throughout the Montney and Duverney formations, from central Alberta to northeast British Columbia.

#### Row 5

#### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

✓ Access to capital

# (5.3.2.2) Effect type

Select all that apply

✓ Risks

✓ Opportunities

# (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

✓ Climate change

# (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

Pembina's investors are increasingly focused on ESG and the transition to a lower carbon economy. Pembina has responded to this focus in part with the commitment to reduce the Company's GHG emissions intensity by 30% by 2030, relative to baseline 2019 emissions. This GHG intensity reduction target will help guide business decisions and is intended to improve overall emissions intensity performance while increasing Pembina's long-term value for our shareholders. We also took a step to align our financing strategy with our ESG priorities by establishing a sustainability-linked loan. The 1 billion sustainability-linked revolving credit facility contains pricing adjustments that reduce or increase borrowing costs based on our performance relative to our GHG emissions intensity reduction target. The specific terms of the new loan facility include annual targets that align with our decarbonization pathway towards our 2030 GHG emissions intensity reduction goal.

# (5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

Identification of spending/revenue that is aligned with your organization's climate transition
Select from: ☑ No, and we do not plan to in the next two years

(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

#### (5.5.1) Investment in low-carbon R&D

Select from:

🗹 Yes

#### (5.5.2) Comment

Pembina sees tremendous value in advancing new technologies which could have a positive impact on climate-related issues. Pembina is actively exploring new technologies centered around a lower carbon economy.

(5.5.7) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

#### Row 1

#### (5.5.7.1) Technology area

Select from:

✓ Hydrogen storage

# (5.5.7.2) Stage of development in the reporting year

Select from:

Applied research and development

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Information is considered confidential at this time however we will evaluate public disclosure of this information for future reporting periods.

# Row 2

# (5.5.7.1) Technology area

Select from:

☑ Carbon capture, utilization, and storage (CCUS)

# (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Applied research and development

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Information is considered confidential at this time however we will evaluate public disclosure of this information for future reporting periods.

#### Row 3

## (5.5.7.1) Technology area

Select from:

☑ Other, please specify: Ammonia

# (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Applied research and development

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Information is considered confidential at this time however we will evaluate public disclosure of this information for future reporting periods.

#### Row 4

# (5.5.7.1) Technology area

Select from:

✓ Pipeline

# (5.5.7.2) Stage of development in the reporting year

# Select from:

✓ Large scale commercial deployment

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Information is considered confidential at this time however we will evaluate public disclosure of this information for future reporting periods.

# (5.6) Break down, by fossil fuel expansion activity, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

#### Exploration of new oil fields

#### (5.6.4) Explain your CAPEX calculations, including any assumptions

Exploration is the domain of upstream oil and gas companies, Pembina's business is predominantly focused on midstream and thus not directly applicable to Pembina. All four of these are upstream concepts.

#### Exploration of new natural gas fields

#### (5.6.4) Explain your CAPEX calculations, including any assumptions

Exploration is the domain of upstream oil and gas companies, Pembina's business is predominantly focused on midstream and thus not directly applicable to Pembina. All four of these are upstream concepts.

# Expansion of existing oil fields

#### (5.6.4) Explain your CAPEX calculations, including any assumptions

Exploration is the domain of upstream oil and gas companies, Pembina's business is predominantly focused on midstream and thus not directly applicable to Pembina. All four of these are upstream concepts.

#### Expansion of existing natural gas fields

### (5.6.4) Explain your CAPEX calculations, including any assumptions

Exploration is the domain of upstream oil and gas companies, Pembina's business is predominantly focused on midstream and thus not directly applicable to Pembina. All four of these are upstream concepts. [Fixed row]

# (5.10) Does your organization use an internal price on environmental externalities?

#### (5.10.1) Use of internal pricing of environmental externalities

Select from:

 $\blacksquare$  No, and we do not plan to in the next two years

#### (5.10.3) Primary reason for not pricing environmental externalities

Select from:

☑ Other, please specify: Pembina applies a market-based approach based on regulated carbon pricing in Canada.

#### (5.10.4) Explain why your organization does not price environmental externalities

The majority of Pembina's capital investments are in Canada, where a regulated carbon pricing schedule guides our market-based carbon pricing approach.

#### (5.11) Do you engage with your value chain on environmental issues?

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	Select from: ✓ Yes	Select all that apply ✓ Climate change
Customers	Select from: ✓ Yes	Select all that apply ✓ Climate change
Investors and shareholders	Select from: ✓ Yes	Select all that apply ✓ Climate change

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Other value chain stakeholders	Select from:	Select all that apply
	✓ Yes	✓ Climate change

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

#### Climate change

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

Ves, suppliers have to meet environmental requirements related to this environmental issue, but they are not included in our supplier contracts

#### (5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ Yes, we have a policy in place for addressing non-compliance

# (5.11.5.3) Comment

Governed by our Supplier Code of Conduct, we work with businesses that identify safety as a top priority, uphold the highest standards of ethics and integrity, and are economically, environmentally, and socially responsible. To ensure we are aligned with our suppliers' ESG priorities, we have incorporated ESG questionnaires and metrics into the supplier selection and evaluation process. To further our sustainability efforts with key suppliers, in 2023 we formalized a Supplier Performance Management program ("SPM") to develop strategic partnerships with these identified suppliers. The SPM allows Pembina to work with key suppliers on innovation and enhance sustainability performance. Our sourcing strategy seeks to move beyond minimum standards by identifying suppliers with demonstrable corporate responsibility and sustainability leadership. We look for suppliers who drive sustainable business growth by minimizing their environmental impacts, fostering a strong safety culture and developing an engaged and valued workforce. As part of our contractor and supplier qualification process, Pembina uses the services of ISNetworld ("ISN") to assess and monitor supplier risk. The process requires suppliers and contractors to complete an ESG questionnaire in ISN detailing their established environmental, social, and governance policies and practices.

# (5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

## **Climate change**

#### (5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a non-public platform

#### (5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

✓ Supplier self-assessment

#### (5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

#### Select from:

✓ 76-99%

#### (5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

✓ 51-75%

# (5.11.6.12) Comment

We continue to address sustainability considerations within our supply chain, including integrating ethics and environmental responsibility into our model. Governed by our Supplier Code of Conduct, we work with businesses that identify safety as a top priority, uphold the highest standards of ethics and integrity, and are economically, environmentally, and socially responsible. As part of our contractor and supplier qualification process, Pembina uses the services of ISNetworld ("ISN") to assess and monitor supplier risk. The process requires suppliers and contractors to complete an ESG questionnaire in ISN detailing their established environmental, social, and governance policies and practices. We aim to merge the safety and ESG portions of ISN into an integrated supplier sustainability and safety performance scorecard by 2024, which will help us assess future supply base and supplier selection.

# (5.11.7) Provide further details of your organization's supplier engagement on environmental issues.

# **Climate change**

### (5.11.7.2) Action driven by supplier engagement

Select from:

☑ Upstream value chain transparency and human rights

#### (5.11.7.3) Type and details of engagement

#### Information collection

- Collect environmental risk and opportunity information at least annually from suppliers
- ☑ Collect GHG emissions data at least annually from suppliers
- ✓ Collect targets information at least annually from suppliers
- ☑ Other information collection activity, please specify: Annual collection of supplier self-reported ESG information

#### (5.11.7.4) Upstream value chain coverage

Select all that apply

✓ Tier 1 suppliers

# (5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

#### Select from:

✓ 100%

### (5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

Our sourcing strategy seeks to move beyond minimum standards by identifying suppliers with demonstrable corporate responsibility and sustainability leadership. To deliver on this strategy, we look for suppliers who drive sustainable business growth by minimizing their environmental impacts, fostering a strong safety culture and developing an engaged and valued workforce. As part of our contractor and supplier qualification process, ISN is used to assess and monitor supplier risk. The process requires suppliers and contractors to complete an ESG questionnaire in ISN detailing their established environmental, social, and governance policies and practices. As part of the pre-qualification and renewal process as well as our standard supplier contract, suppliers are asked to maintain a statement of compliance with Pembina's Health, Safety & Environment ("HSE") policy. Further, we have a Supplier Code of Conduct which suppliers are asked to comply with as part of the supplier on-boarding and compliance program. We aim to merge the safety and ESG portions of ISN into an integrated supplier sustainability and safety performance scorecard by 2024, which will help us assess future supply base and supplier selection.

#### (5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

🗹 Unknown

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

#### Climate change

## (5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify: Owner partners

# (5.11.9.2) Type and details of engagement

#### Education/Information sharing

✓ Other education/information sharing, please specify: Performance and emissions compliance with owner partners at certain large facilities and participates in discussions around any major investment decisions related to climate or emissions technology and carbon credits.

# (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Pembina shares information on performance and compliance around emissions with Pembina's owner partners at certain large facilities. In addition, Pembina participates in discussions around any major investment decisions related to climate or emissions technology. Finally, Pembina also engages with its owner partners in the decision-making process around the use of carbon credits.

# Climate change

# (5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify: Indigenous communities, landowners and other local stakeholders

### (5.11.9.2) Type and details of engagement

#### **Education/Information sharing**

Z Educate and work with stakeholders on understanding and measuring exposure to environmental risks

#### Innovation and collaboration

Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

### (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Pembina consults with local Indigenous communities, landowners and other local stakeholders to minimize Pembina's environmental footprint. By working closely with Indigenous communities and local stakeholders to identify potential risks and or areas of concerns, Pembina is able to incorporate their input into project design and future operating plans. In addition, Pembina participates in discussions with landowners around the environmental impacts, including climate change, of Pembina's projects. This helps to reduce potential for future harm to the environment.

#### **C6. Environmental Performance - Consolidation Approach**

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

#### Climate change

#### (6.1.1) Consolidation approach used

Select from:

Operational control

#### (6.1.2) Provide the rationale for the choice of consolidation approach

Pembina has calculated its greenhouse gas ("GHG") emissions in accordance with the requirements of the World Resource Institute/World Business Council for Sustainability Development Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard Revised Edition (the "GHG Protocol"). Pembina has selected the Operational Control approach to define our organizational boundaries for GHG reporting and includes all material sources and sinks associated with facilities, pipelines, and corporate operations that are in direct operational control by Pembina and Pembina subsidiaries. This approach is consistent with our GHG emissions intensity reduction target which encompasses all Scope 1 and 2 emissions, aggregated to the corporate level on an Operational Control basis.

# **C7. Environmental performance - Climate Change**

(7.1.1) 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?

Has there been a structural change?
Select all that apply
☑ No

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

# (7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

 $\blacksquare$  Yes, a change in methodology

# (7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

In 2023, we implemented an accounting methodology change to upstream emissions related to electricity transmission and distribution (Scope 2). This change in Scope 2 emissions was from a jurisdictional consumption-based method to a generation-based method. This aligns with the most recent GHG Protocol guidance, and results in emissions from electricity transmission and distribution being recategorized as Scope 3 emissions (Fuel and Energy Related Activities).

(7.1.3) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

Select from:

☑ No, because we do not have the data yet and plan to recalculate next year

#### (7.1.3.3) Base year emissions recalculation policy, including significance threshold

As per Pembina's GHG Inventory Methodology, Pembina recalculates base year emissions when major acquisitions, divestment and mergers meet our significance threshold of 15 of Base Year Scope 12 emissions. Pembina will perform a recalculation of our 2019 base year emissions to account for the Alliance/Aux Sable Acquisition (closed in April 2024) as well as the Scope 2 methodology update mentioned in Question 7.1.2.

## (7.1.3.4) Past years' recalculation

Select from:

🗹 No

# (7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Select all that apply

- ☑ The Greenhouse Gas Protocol: Scope 2 Guidance
- ☑ US EPA Mandatory Greenhouse Gas Reporting Rule
- ☑ US EPA Emissions & Generation Resource Integrated Database (eGRID)
- ☑ The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
- ☑ IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011
- ☑ Canadian Association of Petroleum Producers, Calculating Greenhouse Gas Emissions, 2003
- ☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009
- ✓ Other, please specify: Alberta Environment and Protected Areas. Alberta Greenhouse Gas Quantification Methodologies (AQM). September 2023.

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

Select from:

☑ We are reporting a Scope 2, location-based figure

#### (7.3.2) Scope 2, market-based

Select from:

☑ We are reporting a Scope 2, market-based figure

# (7.3.3) Comment

Scope 2 emissions (location-based) are calculated using current generation-based emission factors from Environment and Climate Change Canada's NIR for Canadian facilities and U.S. Environmental Protection Agency's eGRID for US facilities. Scope 2 emissions (market-based) reflect emissions from purchased and imported electricity, hydrogen, and heat sources that derive emissions factors from the underlying contractual instruments. Pembina has started quantifying marketbased emissions where facility-specific emission factors are used if available. Due to the lack of data availability for some assets for contractual energy purchases to calculate facility-specific emission factors, market-based emissions are considered equal to location-based emissions for those assets.

# (7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Select from:

🗹 No

(7.5) Provide your base year and base year emissions.

#### Scope 1

# (7.5.1) Base year end

12/31/2019

#### (7.5.2) Base year emissions (metric tons CO2e)

2588569

## (7.5.3) Methodological details

Pembina uses an operational control boundary for reporting and follows all the standards listed in Question 7.2. Scope 1 emissions are calculated using operational activity data (e.g., fuel consumption data from meters, measured survey data and engineered estimates) multiplied by operationally derived or applicable regulated default emission factors. Energy consumption used to quantify Scope 1 emissions includes all types of fuels consumed by Pembina operations, including natural gas, diesel, gasoline, propane and jet fuel. Fuel consumption is based on a combination of third-party supplier invoices, meter readings, and system generated reports.

#### Scope 2 (location-based)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

1430608

#### (7.5.3) Methodological details

Pembina uses an operational control boundary for reporting and follows all the standards listed in Question 7.2. Total Scope 2 emissions (location-based) are indirect emissions from purchased and imported electricity, hydrogen, and heat consumption. Scope 2 emissions are calculated using location-based grid emission factors from the most recent Environment and Climate Change Canada's National Inventory Report (NIR) for Canadian facilities, U.S. Environmental Protection Agency's eGRID for US facilities, and AB TIER for imported heat and hydrogen.

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

#### **Reporting year**

#### (7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

2842868

(7.6.3) Methodological details

Pembina uses an operational control boundary for reporting and follows all the standards listed in Question 7.2. Scope 1 emissions are calculated using operational activity data (e.g., fuel consumption data from meters, measured survey data and engineered estimates) multiplied by operationally derived or applicable regulated default emission factors. Energy consumption used to quantify Scope 1 emissions includes all types of fuels consumed by Pembina operations, including natural gas, diesel, gasoline, propane and jet fuel. Fuel consumption is based on a combination of third-party supplier invoices, meter readings, and system generated reports.

# (7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

#### **Reporting year**

#### (7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

1202075

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

1126088

# (7.7.4) Methodological details

Pembina uses an operational control boundary for reporting and follows all the standards listed in Question 7.2. Total Scope 2 emissions (location-based) are indirect emissions from purchased and imported electricity, hydrogen, and heat consumption. Scope 2 emissions are calculated using generation-based grid emission factors from the most recent Environment and Climate Change Canada's National Inventory Report (NIR) for Canadian facilities, U.S. Environmental Protection Agency's eGRID for US facilities, and AB TIER for imported heat and hydrogen. Total Scope 2 emissions (market-based) reflect emissions from purchased and imported electricity, hydrogen, and heat sources that derive emissions factors from the underlying contractual instruments. Pembina has started quantifying market-based emissions where facility specific emission factors are used if available. Due to the lack of data availability for some assets for contractual energy purchases to calculate facility specific emission factors, market-based emissions are considered equal to location-based emissions for those assets.

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

# Purchased goods and services

#### (7.8.1) Evaluation status

Select from:

#### ✓ Relevant, not yet calculated

#### (7.8.5) Please explain

Emissions from purchased goods and services may be relevant but have not yet been calculated.

#### **Capital goods**

#### (7.8.1) Evaluation status

Select from:

Relevant, not yet calculated

#### (7.8.5) Please explain

Emissions from capital goods may be relevant but have not yet been calculated.

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

#### (7.8.1) Evaluation status

Select from:

Relevant, calculated

#### (7.8.2) Emissions in reporting year (metric tons CO2e)

585843

#### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Fuel-based method

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

#### (7.8.5) Please explain

Scope 3 emissions have been estimated based on the best available data and are determined using various assumptions and estimated calculations. In 2023, we further refined our methodology to enhance the accuracy of reported emissions.

#### Upstream transportation and distribution

## (7.8.1) Evaluation status

Select from:

Relevant, not yet calculated

# (7.8.5) Please explain

Further assessment of emissions from upstream transportation and distribution of products purchased by Pembina is required.

#### Waste generated in operations

#### (7.8.1) Evaluation status

Select from:

Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

123154

# (7.8.3) Emissions calculation methodology

Select all that apply

✓ Fuel-based method

Distance-based method

✓ Waste-type-specific method

0

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

# (7.8.5) Please explain

This is calculated based on the waste data reported in 2023 and includes both transportation related emissions from the waste, as well as the processing emissions of each waste type.

#### **Business travel**

#### (7.8.1) Evaluation status

Select from:

Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

1537

#### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Supplier-specific method

✓ Distance-based method

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

60

#### (7.8.5) Please explain

Pembina tracks business travel (transportation of employees for business-related activities in vehicles not owned or operated by Pembina). In 2023, Pembina revised its methodology to include hotel stays as a part of business travel. All emissions in this category were estimated based on supplier data, which was estimated to cover approximately 60% of Pembina's business travel.

#### **Employee commuting**

#### (7.8.1) Evaluation status

Select from:

Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

11927

#### (7.8.3) Emissions calculation methodology

Select all that apply

- Average data method
- ✓ Fuel-based method
- ☑ Other, please specify: Local government statistics on transportation

# (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

# (7.8.5) Please explain

Pembina is using estimates from transportation data from municipalities to estimate employee commuting emissions and field employee commuting emissions are also included as part of this calculation.

# **Upstream leased assets**

#### (7.8.1) Evaluation status

Select from:

Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

#### (7.8.3) Emissions calculation methodology

Select all that apply

✓ Fuel-based method

### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

## (7.8.5) Please explain

Emissions in this category are limited during this reporting year to those associated with our corporate headquarters in Calgary. The other field offices are considered under operational control and are included as part of Scope 1 and 2 emissions.

#### Downstream transportation and distribution

#### (7.8.1) Evaluation status

Select from:

Relevant, not yet calculated

#### (7.8.5) Please explain

Further assessment of transportation and distribution of any products sold by Pembina to the end customer is required.

#### **Processing of sold products**

# (7.8.1) Evaluation status

Select from:

✓ Relevant, not yet calculated

# (7.8.5) Please explain

Further assessment of processing of sold products by Pembina is required.

#### Use of sold products

#### (7.8.1) Evaluation status

Select from:

Relevant, not yet calculated

#### (7.8.5) Please explain

Further assessment of end use of goods and services sold by Pembina is required.

#### End of life treatment of sold products

## (7.8.1) Evaluation status

Select from:

Relevant, not yet calculated

#### (7.8.5) Please explain

Pembina is engaged primarily in the provision of transportation and midstream services and not the sale of products. Further assessment is required.

### **Downstream leased assets**

# (7.8.1) Evaluation status

Select from: ✓ Relevant, not yet calculated

#### (7.8.5) Please explain

Further assessment of downstream leased assets by Pembina is required.

#### Franchises

#### (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

Pembina does not have any franchises.

#### Investments

# (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

1065298

# (7.8.3) Emissions calculation methodology

Select all that apply

✓ Investment-specific method

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

100

## (7.8.5) Please explain

Scope 1 and 2 emissions were reported to Pembina by our partners for two significant investments and these have been prorated to Pembina's ownership interest.

# **Other (upstream)**

#### (7.8.1) Evaluation status

Select from:

✓ Not evaluated

# (7.8.5) Please explain

Not applicable.

## Other (downstream)

# (7.8.1) Evaluation status

Select from:

Not evaluated

(7.8.5) Please explain

Not applicable.

(7.8.1) Disclose or restate your Scope 3 emissions data for previous years.

#### Past year 1

# (7.8.1.1) End date

12/31/2022

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

557011

#### (7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

50362

#### (7.8.1.7) Scope 3: Business travel (metric tons CO2e)

460

#### (7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

3471

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

1072634

#### (7.8.1.19) Comment

Category 3 2022 emissions have been restated to include emissions sources that were omitted in prior year reporting. Category 15 2022 emissions have been restated to reflect amended data provided by the Alliance Pipeline operator.

# (7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Select from: <ul> <li>Third-party verification or assurance process in place</li> </ul>
Scope 2 (location-based or market-based)	Select from: <ul> <li>Third-party verification or assurance process in place</li> </ul>
Scope 3	Select from: ☑ No third-party verification or assurance

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

Row 1

#### (7.9.1.1) Verification or assurance cycle in place

Select from:

Annual process

#### (7.9.1.2) Status in the current reporting year

Select from:

✓ Complete

#### (7.9.1.3) Type of verification or assurance

Select from:

✓ Limited assurance

# (7.9.1.4) Attach the statement

2023-GHG-Assurance-Statement.pdf

# (7.9.1.5) Page/section reference

Subject Matter Information & Applicable Criteria page 1, Selected Environmental Indicators Report page 4 and Appendix 1 GHG Reporting Evaluation Criteria page 5 & 6

# (7.9.1.6) Relevant standard

Select from:

✓ Other, please specify: Canadian Standards on Assurance Engagements (CSAE) 3000 Attestation Engagements Other than Audits or Reviews of Historical Financial Information and CSAE 3410 Assurance Engagements on Greenhouse Gas Statements

# (7.9.1.7) Proportion of reported emissions verified (%)

100

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

Row 1

(7.9.2.1) Scope 2 approach

Select from:

✓ Scope 2 location-based

#### (7.9.2.2) Verification or assurance cycle in place

Select from:

✓ Annual process

#### (7.9.2.3) Status in the current reporting year

Select from:

✓ Complete

#### (7.9.2.4) Type of verification or assurance

Select from:

✓ Limited assurance

# (7.9.2.5) Attach the statement

2023-GHG-Assurance-Statement.pdf

(7.9.2.6) Page/ section reference

Subject Matter Information & Applicable Criteria page 1, Selected Environmental Indicators Report page 4 and Appendix 1 GHG Reporting Evaluation Criteria page 5 & 6

#### (7.9.2.7) Relevant standard

Select from:

✓ Other, please specify: Canadian Standards on Assurance Engagements (CSAE) 3000 Attestation Engagements Other than Audits or Reviews of Historical Financial Information and CSAE 3410 Assurance Engagements on Greenhouse Gas Statements

#### (7.9.2.8) Proportion of reported emissions verified (%)

100

Row 2

#### (7.9.2.1) Scope 2 approach

Select from:

✓ Scope 2 market-based

#### (7.9.2.2) Verification or assurance cycle in place

Select from:

☑ Annual process

#### (7.9.2.3) Status in the current reporting year

Select from:

✓ Complete

#### (7.9.2.4) Type of verification or assurance

Select from:

✓ Limited assurance

2023-GHG-Assurance-Statement.pdf

### (7.9.2.6) Page/ section reference

Subject Matter Information & Applicable Criteria page 1, Selected Environmental Indicators Report page 4 and Appendix 1 GHG Reporting Evaluation Criteria page 5 & 6

# (7.9.2.7) Relevant standard

Select from:

✓ Other, please specify: Canadian Standards on Assurance Engagements (CSAE) 3000 Attestation Engagements Other than Audits or Reviews of Historical Financial Information and CSAE 3410 Assurance Engagements on Greenhouse Gas Statements

# (7.9.2.8) Proportion of reported emissions verified (%)

100

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

Select from: Decreased

(7.10.1) 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 renewable energy consumption

#### (7.10.1.1) Change in emissions (metric tons CO2e)

0

### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### (7.10.1.3) Emissions value (percentage)

0

### (7.10.1.4) Please explain calculation

There was no change in renewable energy consumption that resulted in a change in Scope 1 & 2 emissions in 2023.

#### Other emissions reduction activities

#### (7.10.1.1) Change in emissions (metric tons CO2e)

30079

# (7.10.1.2) Direction of change in emissions

Select from:

Decreased

#### (7.10.1.3) Emissions value (percentage)

0.8

#### (7.10.1.4) Please explain calculation

Please refer to response to Question 7.55.2 under implemented.

#### Divestment

# (7.10.1.1) Change in emissions (metric tons CO2e)

#### (7.10.1.2) Direction of change in emissions

Select from:

✓ Decreased

# (7.10.1.3) Emissions value (percentage)

0.2

#### (7.10.1.4) Please explain calculation

There was one divestment that occurred in October 2023. The reported Scope 1 and Scope 2 emissions include the facilities divested up to the operational end date in 2023.

#### Acquisitions

#### (7.10.1.1) Change in emissions (metric tons CO2e)

0

## (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

#### (7.10.1.3) Emissions value (percentage)

0

### (7.10.1.4) Please explain calculation

There were no acquisitions that resulted in a change in Scope 1 and 2 emissions in 2023.

#### Mergers
0

# (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

(7.10.1.3) Emissions value (percentage)

0

# (7.10.1.4) Please explain calculation

There were no mergers that resulted in a change in Scope 1 and 2 emissions in 2023.

### Change in output

# (7.10.1.1) Change in emissions (metric tons CO2e)

66660

# (7.10.1.2) Direction of change in emissions

Select from:

Decreased

# (7.10.1.3) Emissions value (percentage)

1.7

# (7.10.1.4) Please explain calculation

Using same percentage of change of throughput to apply to change in emissions.

# Change in methodology

# (7.10.1.1) Change in emissions (metric tons CO2e)

60704

# (7.10.1.2) Direction of change in emissions

Select from:

✓ Decreased

(7.10.1.3) Emissions value (percentage)

1.5

# (7.10.1.4) Please explain calculation

The decrease is due to the use of generation-based method instead of consumption-based method to calculate Scope 2 emissions in 2023.

# Change in boundary

# (7.10.1.1) Change in emissions (metric tons CO2e)

0

# (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

### (7.10.1.3) Emissions value (percentage)

0

# (7.10.1.4) Please explain calculation

There was no change in boundary that resulted in a change in Scope 1 and 2 emissions in 2023.

## Change in physical operating conditions

#### (7.10.1.1) Change in emissions (metric tons CO2e)

0

# (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

(7.10.1.3) Emissions value (percentage)

0

### (7.10.1.4) Please explain calculation

There was no change in physical operating conditions that resulted in a change in Scope 1 and 2 emissions in 2023.

## Unidentified

# (7.10.1.1) Change in emissions (metric tons CO2e)

0

#### (7.10.1.2) Direction of change in emissions

Select from:

✓ No change

# (7.10.1.3) Emissions value (percentage)

0

# (7.10.1.4) Please explain calculation

Not applicable.

## Other

# (7.10.1.1) Change in emissions (metric tons CO2e)

6473

# (7.10.1.2) Direction of change in emissions

Select from:

Decreased

# (7.10.1.3) Emissions value (percentage)

0.2

# (7.10.1.4) Please explain calculation

This change is a combination of decrease in electricity consumption, decrease in mobile emissions, and grid emission factors updates.

# (7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Select from:

✓ Market-based

# (7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:

🗹 No

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

Select from:

✓ Yes

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

Row 1

(7.15.1.1) Greenhouse gas

Select from:

✓ C02

## (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

2621096

# (7.15.1.3) GWP Reference

Select from: ✓ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 2

# (7.15.1.1) Greenhouse gas

Select from:

CH4

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

173338.74

# (7.15.1.3) GWP Reference

#### Select from:

✓ IPCC Fifth Assessment Report (AR5 – 100 year)

# Row 3

# (7.15.1.1) Greenhouse gas

Select from:

✓ N20

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

#### 48098.63

# (7.15.1.3) GWP Reference

Select from:

✓ IPCC Fifth Assessment Report (AR5 – 100 year)

#### Row 4

# (7.15.1.1) Greenhouse gas

Select from:

✓ HFCs

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

334.63

# (7.15.1.3) GWP Reference

Select from:

# (7.15.4) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type.

Row 1

# (7.15.4.1) Emissions category

Select from:

✓ Combustion (excluding flaring)

# (7.15.4.2) Value chain

Select all that apply

✓ Midstream

# (7.15.4.3) Product

Select from:

✓ Unable to disaggregate

# (7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

2075635.12

# (7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

3879.32

# (7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

2230180

# (7.15.4.7) Comment

Energy consumption used to quantify combustion emissions includes all types of fuels consumed by Pembina operations, including natural gas, diesel, gasoline, and propane. Fuel consumption is based on a combination of third-party supplier invoices, meter readings, and system generated reports.

#### Row 2

# (7.15.4.1) Emissions category

Select from:

Flaring

# (7.15.4.2) Value chain

Select all that apply

✓ Midstream

(7.15.4.3) Product

Select from:

✓ Unable to disaggregate

## (7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

514408.58

# (7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

708.2

# (7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

536363

(7.15.4.7) Comment

Flaring emissions are calculated using operational activity data (e.g., measured data and engineered estimates) multiplied by operationally derived or applicable regulated default emission factors.

# Row 3

(7.15.4.1) Emissions category

Select from:

Venting

# (7.15.4.2) Value chain

Select all that apply

✓ Midstream

# (7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

841.13

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

1110.55

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

31937

# (7.15.4.7) Comment

Venting emissions are calculated using operational activity data (e.g., measured data and engineered estimates) multiplied by operationally derived or applicable regulated default emission factors.

# (7.15.4.1) Emissions category

Select from:

Fugitives

# (7.15.4.2) Value chain

Select all that apply

✓ Midstream

# (7.15.4.3) Product

Select from:

✓ Unable to disaggregate

#### (7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

16.21

# (7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

491.77

# (7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

13800.31

# (7.15.4.7) Comment

Fugitive emissions are calculated using operational activity data (e.g., measured survey data and engineered estimates) multiplied by operationally derived or applicable regulated default emission factors.

#### Row 5

# (7.15.4.1) Emissions category

#### Select from:

✓ Other (please specify): Other including mobile

# (7.15.4.2) Value chain

Select all that apply

✓ Midstream

(7.15.4.3) Product

Select from:

✓ Unable to disaggregate

#### (7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

30195.14

# (7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

0.82

# (7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

30587.88

# (7.15.4.7) Comment

This includes our mobile and other emissions.

# (7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Canada	2537598.41	1071561.832	995574.391
United States of America	305269.777	130513.168	130513.168

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

Select all that apply

☑ By business division

# (7.17.1) Break down your total gross global Scope 1 emissions by business division.

	Business division	Scope 1 emissions (metric ton CO2e)
Row 1	Pipelines	2153.35
Row 3	Facilities	2815228.05
Row 4	Corporate	25486.78

# (7.19) 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
Oil and gas production activities (midstream)	2842868	2842868	Pembina is a midstream operator.

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

Select all that apply

 $\blacksquare$  By business division

# (7.20.1) 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)
Row 1	Corporate	1412.06	1412.06
Row 3	Facilities	693184.69	617197.25
Row 4	Pipelines	507478.25	507478.25

(7.21) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Oil and gas production activities (upstream)	0	0	Pembina is not an upstream operator.
Oil and gas production activities (midstream)	1202075	1126088	Pembina is a midstream operator.
Oil and gas production activities (downstream)	0	0	Pembina is not a downstream operator.

(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Select from:

🗹 Yes

(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Row 1

(7.23.1.1) Subsidiary name

# (7.23.1.2) Primary activity

Select from:

☑ Oil & gas extraction

# (7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

✓ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1923077.663

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

329598

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

329598

# (7.23.1.15) Comment

All of these assets are apart of PGI, which is a joint venture that Pembina has 60% ownership. The numbers reported here are from PGI assets that Pembina had 100% operational control in 2023.

# (7.24) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.

Row 1

(7.24.1) Oil and gas business division

#### Select all that apply

✓ Midstream

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

0.003

# (7.24.3) Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division

0.001

### (7.24.4) Indicate whether your methane emissions figure is based on observational data

Select from:

 $\blacksquare$  Both observational data and estimated or modelled data

# (7.24.5) Details of methodology

Methane emissions are reported as per Question 7.15.1, using AR5 GWP of 28 for methane. The total BOE was quantified and assured as part of the emissions intensity disclosure. Reported as methane emissions (tCH4) over natural gas (BOE) 0.0030% Reported as methane emissions (tCH4) over total (BOE) 0.0006%

# (7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:

✓ More than 30% but less than or equal to 35%

# (7.30) 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)	Select from: ✓ Yes
Consumption of purchased or acquired electricity	Select from: ✓ Yes

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of purchased or acquired heat	Select from: ✓ Yes
Consumption of purchased or acquired steam	Select from: ✓ No
Consumption of purchased or acquired cooling	Select from: ✓ No
Generation of electricity, heat, steam, or cooling	Select from: ✓ No

# (7.30.1) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

# Consumption of fuel (excluding feedstock)

# (7.30.1.1) Heating value

Select from:

✓ Unable to confirm heating value

# (7.30.1.2) MWh from renewable sources

0

#### (7.30.1.3) MWh from non-renewable sources

13593173.5

# (7.30.1.4) Total (renewable and non-renewable) MWh

13593173.5

## Consumption of purchased or acquired electricity

# (7.30.1.1) Heating value

Select from:

✓ Unable to confirm heating value

# (7.30.1.2) MWh from renewable sources

187339.82

# (7.30.1.3) MWh from non-renewable sources

2253754.65

(7.30.1.4) Total (renewable and non-renewable) MWh

2443094.47

# Consumption of purchased or acquired heat

# (7.30.1.1) Heating value

Select from:

✓ Unable to confirm heating value

# (7.30.1.2) MWh from renewable sources

0

# (7.30.1.3) MWh from non-renewable sources

507777.62

# (7.30.1.4) Total (renewable and non-renewable) MWh

507777.62

# Total energy consumption

# (7.30.1.1) Heating value

Select from:

✓ Unable to confirm heating value

# (7.30.1.2) MWh from renewable sources

189339.82

(7.30.1.3) MWh from non-renewable sources

16354705.77

# (7.30.1.4) Total (renewable and non-renewable) MWh

16544045.59

# (7.30.6) 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	Select from: ✓ Yes
Consumption of fuel for the generation of heat	Select from: ✓ Yes
Consumption of fuel for the generation of steam	Select from: ✓ Yes
Consumption of fuel for the generation of cooling	Select from: ✓ No

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for co-generation or tri-generation	Select from:
	✓ Yes

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

## Sustainable biomass

# (7.30.7.1) Heating value

Select from:

✓ Unable to confirm heating value

### Gas

# (7.30.7.1) Heating value

Select from:

✓ Unable to confirm heating value

# (7.30.7.2) Total fuel MWh consumed by the organization

13502811.52

(7.30.7.3) MWh fuel consumed for self-generation of electricity

1675969.66

(7.30.7.4) MWh fuel consumed for self-generation of heat

150660.78

(7.30.7.6) MWh fuel consumed for self-generation of cooling

# (7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

#### 1833441.11

# (7.30.7.8) Comment

This is based on all natural gas inventory consumed as part of Scope 1 emissions quantification process. The fuel consumption for self generated electricity, heat and co-gen are based on TIER calculations.

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

# (7.30.7.1) Heating value

Select from:

✓ Unable to confirm heating value

### (7.30.7.2) Total fuel MWh consumed by the organization

105790.34

# (7.30.7.3) MWh fuel consumed for self-generation of electricity

0

# (7.30.7.4) MWh fuel consumed for self-generation of heat

0

# (7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

# (7.30.7.8) Comment

This is based on all non-variable fuel, mobile fuel and imported hydrogen inventory consumed as part of Scope 1 and 2 emissions quantification process.

# **Total fuel**

# (7.30.7.1) Heating value

Select from:

✓ Unable to confirm heating value

# (7.30.7.2) Total fuel MWh consumed by the organization

13608601.36

(7.30.7.3) MWh fuel consumed for self-generation of electricity

1675969.66

## (7.30.7.4) MWh fuel consumed for self-generation of heat

150660.78

# (7.30.7.6) MWh fuel consumed for self-generation of cooling

0

# (7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

1833441.11

(7.30.7.8) Comment

See above.

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

### Canada

(7.30.16.1) Consumption of purchased electricity (MWh)

2084793.95

(7.30.16.2) Consumption of self-generated electricity (MWh)

959902.36

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

507777.98

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

550935.8

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

4103410.09

**United States of America** 

(7.30.16.1) Consumption of purchased electricity (MWh)

358300.52

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

0

# (7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

358300.52

(7.45) 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.

#### Row 1

# (7.45.1) Intensity figure

0.000435

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

3968955.75

# (7.45.3) Metric denominator

Select from:

✓ unit total revenue

# (7.45.4) Metric denominator: Unit total

9125000000

# (7.45.5) Scope 2 figure used

Select from:

✓ Market-based

# (7.45.6) % change from previous year

21.84

# (7.45.7) Direction of change

Select from:

✓ Increased

## (7.45.8) Reasons for change

Select all that apply

✓ Change in revenue

# (7.45.9) Please explain

Increase in this intensity figure due to decrease in revenue at 27%, which offsets the decrease in Scope 1 and Scope 2.

Row 2

# (7.45.1) Intensity figure

0.0037

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

3968955.75

(7.45.3) Metric denominator

#### Select from:

✓ Barrel of oil equivalent (BOE)

# (7.45.4) Metric denominator: Unit total

1074136401

# (7.45.5) Scope 2 figure used

Select from:

✓ Market-based

# (7.45.6) % change from previous year

2.37

# (7.45.7) Direction of change

Select from:

✓ Decreased

# (7.45.8) Reasons for change

Select all that apply

- ✓ Other emissions reduction activities
- ✓ Change in methodology

# (7.45.9) Please explain

Decrease in Scope 1 and Scope 2 in 2023 compared to 2022.

# (7.48) Provide the intensity figures for Scope 1 emissions (metric tons CO2e) per unit of hydrocarbon category.

# Row 1

# (7.48.1) Unit of hydrocarbon category (denominator)

Select from:

✓ Other, please specify: Barrels of oil equivalent

# (7.48.2) Metric tons CO2e from hydrocarbon category per unit specified

0

# (7.48.3) % change from previous year

2

# (7.48.4) Direction of change

Select from:

✓ Increased

# (7.48.5) Reason for change

There is a slight increase in 2023 Scope 1 primarily due to an increase in fuel combustion for the Empress co-generation unit that came online in 2023 for a full year of operations.

# (7.48.6) Comment

The calculated Scope 1 metric tons CO2e from hydrocarbon category per unit specified is 0.00265 tCO2e per BOE.

# (7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

Intensity target

# (7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

# (7.53.2.1) Target reference number

Select from:

🗹 Int 1

# (7.53.2.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

# (7.53.2.5) Date target was set

10/20/2021

# (7.53.2.6) Target coverage

Select from:

✓ Organization-wide

# (7.53.2.7) Greenhouse gases covered by target

Select all that apply

- ✓ Methane (CH4)
- ✓ Nitrous oxide (N2O)
- ☑ Carbon dioxide (CO2)
- ✓ Perfluorocarbons (PFCs)
- ✓ Hydrofluorocarbons (HFCs)

# (7.53.2.8) Scopes

Select all that apply

Scope 1

Nitrogen trifluoride (NF3)Sulphur hexafluoride (SF6)

#### (7.53.2.9) Scope 2 accounting method

Select from:

✓ Location-based

# (7.53.2.11) Intensity metric

Select from:

✓ Metric tons CO2e per barrel of oil equivalent (BOE)

(7.53.2.12) End date of base year

12/31/2019

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

0.00256

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

0.00142

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

0.0039800000

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

100

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

100

# (7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

100

## (7.53.2.55) End date of target

12/31/2030

(7.53.2.56) Targeted reduction from base year (%)

30

(7.53.2.57) Intensity figure at end date of target for all selected Scopes (metric tons CO2e per unit of activity)

0.0027860000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

-1.2

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

0.00265

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

0.00105

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

0.0037000000

#### (7.53.2.81) Land-related emissions covered by target

Select from:

Ves, it covers land-related emissions/removals associated with bioenergy and non-land related emissions (e.g. non-FLAG SBT with bioenergy)

#### 23.45

#### (7.53.2.83) Target status in reporting year

Select from:

Underway

#### (7.53.2.85) Explain target coverage and identify any exclusions

Our GHG emissions intensity reduction target encompasses all Scope 1 and 2 emissions, aggregated to the corporate level on an Operational Control basis.

# (7.53.2.86) Target objective

In 2021, Pembina committed to reducing its GHG emissions intensity by 30 percent by 2030, relative to 2019 baseline emissions. The GHG reduction target is intended to help guide business decisions and improve overall emissions intensity performance while increasing Pembina's long-term value and ensuring Canadian energy is developed and delivered responsibly. To meet the target, Pembina will focus initially on operational opportunities, greater use of renewable and lower emission energy sources, and investments in a lower carbon economy.

#### (7.53.2.87) Plan for achieving target, and progress made to the end of the reporting year

There are multiple pathways to achieve our target: • Reducing our GHG emissions via optimizing asset capacity and operations, constructing and operating cogeneration facilities, modernizing and optimizing our assets to reduce the amount of energy consumed enhancing leak detection and repair programs at facilities, and reducing flaring and venting. • Increasing the use of renewable energy through Power Purchase Agreements ("PPAs) with TransAlta on the 100MW Garden Plain Wind Power Project and with Capstone on the 105MW Wild Rose 2 Wind Farm and exploring other potential small-scale onsite renewable power opportunities. • Developing the Alberta Carbon Grid ("ACG") to effectively manage emissions and contribute positively to a lower-carbon economy and evaluating pilot projects for carbon capture and storage at Pembina's gas processing and fractionation facilities.

# (7.53.2.88) Target derived using a sectoral decarbonization approach

Select from: ✓ No

# (7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply ☑ No other climate-related targets

(7.54.4) Indicate which targets reported in 7.53.1/2 incorporate methane emissions, or if you do not have a methanespecific 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.

Pembina's target to reduce our emissions intensity by 30% by 2030 is inclusive of methane emissions.

(7.55) 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.

Select from:

🗹 Yes

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	Numeric input
To be implemented	4	31368
Implementation commenced	0	0
Implemented	9	30079
Not to be implemented	0	Numeric input

(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

Row 1

(7.55.2.1) Initiative category & Initiative type

#### **Energy efficiency in production processes**

Process optimization

#### (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

30079

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

Select all that apply

✓ Scope 1

✓ Scope 2 (location-based)

✓ Scope 2 (market-based)

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

# (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

3212000

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

6025000

# (7.55.2.7) Payback period

Select from:

✓ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

✓ 11-15 years

#### (7.55.2.9) Comment

This initiative in 2023 consisted of all energy efficiency and process optimization projects including leak repairs, compressor engine upgrades, and flow mode optimization. Project economics considered multiple factors, and the annual monetary savings indicated excludes confidential factors.

# (7.55.3) What methods do you use to drive investment in emissions reduction activities?

#### Row 1

(7.55.3.1) Method

Select from:

✓ Compliance with regulatory requirements/standards

# (7.55.3.2) Comment

All of Pembina's Canadian assets are covered by carbon emissions intensity regulations or carbon tax frameworks. Pembina strives to mitigate carbon compliance costs by seeking operational improvements and energy efficiency projects that improve production output and/or carbon emissions reductions.

## Row 3

# (7.55.3.1) Method

Select from:

✓ Internal incentives/recognition programs

# (7.55.3.2) Comment

Pembina's short-term incentive plan includes performance goals related to ESG metrics and emissions intensity targets. Included in those metrics is meeting our oneyear target under our Board-approved emissions intensity reduction plan. Achieving this metric will have an impact on annual compensation for all employees. We believe that linking compensation to corporate performance on climate-related ESG factors, including our emissions intensity targets, aligns with long-term value creation and our stakeholders' interests.

# (7.57) Describe your organization's efforts to reduce methane emissions from your activities.

Pembina has developed a Fugitive Emissions Management Program to comply with the applicable regulations for the survey and measurement of vented and fugitive methane emissions from our Canadian natural gas processing, transportation and handling operations. Emissions surveys are conducted up to three times per year. Based on the survey findings and economic analysis, Pembina undertakes repairs on identified fugitive leaks or takes corrective actions, in alignment with regulatory requirements, to mitigate vented emissions through equipment upgrades, retrofits or focused maintenance programs to ensure equipment is operating as efficient as possible. In the US, Pembina's Aux Sable facilities have an obligation to monitor and report under the federal (US EPA) Greenhouse Gas Reporting Program. We are required to report annually but there are no emissions limits or requirement to reduce methane emissions at this time. Pembina will continue to monitor upcoming changes to methane regulations in the US. Regulations applicable to Pembina's operations include: federal Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector); Alberta Methane Emission Reduction Regulation, made under the Alberta Environmental Protection and Enhancement Act and incorporating several sections of the Alberta Energy Regulator Directive 017 and Directive 060; Saskatchewan Directive PNG036: Venting and Flaring Requirements made under the Saskatchewan Oil and Gas Conservation Act and the British Columbia Drilling and Production Regulation made under the British Columbia Oil and Gas Activities Act.

# (7.61) 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?

Select from: Ves

# (7.61.1) 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.

In 2020, Pembina implemented a fugitive emissions leak detection and repair program at 100% of our natural gas processing, natural gas pipeline transportation and handling operations. The leak detection program was also implemented on select liquid hydrocarbon pipeline and storage assets where required by applicable regulation. Where required, fugitive emission leaks are identified by following the US EPA Method 21 and/or the utilization of a qualified optical gas-imaging instrumentation. These comprehensive fugitive emission surveys are conducted up to three times per year and are completed by trained third-party consultants. Identified fugitive emission leaks are measured, quantified and tagged for subsequent repairs by Pembina's instrumentation and maintenance teams. Fugitive emission leaks are tracked until repairs are made and confirmed as completed. The results are recorded and reported as required by the applicable regulatory authority.

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

Flaring activities predominately occur at our natural gas processing and natural gas liquid fractionation facilities, where waste gas or processing upsets result in the actuation of flaring or incineration systems. Flaring and incineration activities are regulated under operational limits (i.e., daily volume limits) and/or annual flaring limits. Pembina is committed to maintaining regulatory compliance at all our facilities. Pembina's target (Int1) to reduce our emissions intensity by 30% by 2030 is inclusive of flaring emissions reductions.

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

Select from:

🗹 No

# (7.79) Has your organization canceled any project-based carbon credits within the reporting year?

Select from:

🗹 No

# C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

Other environmental information included in your CDP response is verified and/or assured by a third party
Select from: ✓ Yes

(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?

#### Row 1

# (13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

✓ Climate change

# (13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Other data point in module 7, please specify: Physical Throughput and Total Scope 1 and 2 GHG Emissions Intensity

# (13.1.1.3) Verification/assurance standard

**General standards** 

☑ CSAE 3000
## (13.1.1.4) Further details of the third-party verification/assurance process

KPMG performed a limited assurance engagement over Pembina's reported 2023 scope 1 and 2 GHG emissions intensity. Pembina calculates its GHG emissions in accordance with the requirements of the GHG Protocol. Pembina measures and reports physical throughput volumes for each of its assets in accordance with internally developed criteria. The assured GHG emissions and physical throughput are used to calculate Pembina's GHG emissions intensity. Verification is completed on an annual basis, covers Pembina's direct operations and is the metric aligned to our target to reduce scope 1 and 2 GHG emissions intensity 30% by 2030, relative to a 2019 baseline.

## (13.1.1.5) Attach verification/assurance evidence/report (optional)

2023-GHG-Assurance-Statement.pdf

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

## (13.3.1) Job title

Senior Vice President, External Affairs & Chief Legal and Sustainability Officer

## (13.3.2) Corresponding job category

Select from:

✓ Chief Sustainability Officer (CSO)