Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

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

Enerplus Corporation (Enerplus) has a diversified portfolio of oil and gas properties throughout North America. At the conclusion of 2022, Enerplus divested the majority of its operating Canadian assets through two separate transactions. Throughout 2022, Enerplus produced an average of approximately 100,326 BOE/day, with 61% of the total production from crude oil and natural gas liquids and 39% of the total production originating from natural gas.

We have corporate offices located in Calgary, Alberta, and Denver, Colorado. In 2022, Enerplus had field offices located throughout Alberta, Saskatchewan, Colorado and North Dakota. As of December 31, 2022, Enerplus employed a total of 380 people, including full-time benefit and payroll consultants, 227 of whom were in the United States and 153 of whom were in Canada.

Enerplus strives to continuously improve the efficiency of its energy consumption, reduce our greenhouse gas emissions intensity and provide resources, training and technology to meet our environmental objectives. In 2022, we revised mid-term and long-term targets to reduce our methane emissions intensity, and revised our long-term target to reduce our GHG emissions intensity. In addition, we continued to work towards our mid-term target to reduce freshwater use in our completion operations while continuing to work towards our mid-term health and safety target. We have several additional ongoing environmental initiatives, including:
• greenhouse gas (GHG) emissions and the upgrading of small pneumatic venting equipment;
• site environmental inspection and audit program;
• water management planning including an increased focus on water reuse and recycling;
• waste management and recycling programs;
• fugitive emissions management program; and
• the remediation and reclamation of decommissioned landscapes.

In 2022, Enerplus reported its key environmental and safety metrics in its ESG Report and its TCFD Aligned Reporting Table. Enerplus' efforts in key performance indicator disclosure and community engagement demonstrate our commitment to responsible resource development

and to continuous improvement in environment, health, safety and social performance. nt in environment, health, safety and social performance.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

4 years

Select the number of past reporting years you will be providing Scope 2 emissions data for

4 years

Select the number of past reporting years you will be providing Scope 3 emissions data for

4 years

C0.3

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

Canada

United States of America

C0.4

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

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-OG0.7

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

Row 1

Oil and gas value chain

Upstream

Other divisions

C0.8

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

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	ERF

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	The board of directors Reserves, Safety and Social Responsibility (RS&SR) committee was established by the Enerplus Board of Directors and has responsibility for climate-related issues, ESG strategy and metrics and additional environmental, engagement and safety metrics.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Reviewing and guiding strategy Overseeing and guiding scenario analysis Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Reviewing and guiding the risk management process	The manager of the Corporate Sustainability department reports to the board on relevant matters pertaining to climate-related issues such as emissions management including methane in various changing regulatory jurisdictions. Board oversight of climate-related issues is integrated into board governance mechanisms when reviewing and guiding strategy, performance management, action planning, managing risks, ESG strategy and validating business plans and budgets.

C1.1d

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

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	Significant experience (>15 years) relating to strategic management of environmental, social, and health & safety. Expertise in capital markets and ESG oversight.

C1.2

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

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Integrating climate-related issues into the strategy
Monitoring progress against climate-related corporate targets
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Position or committee

Chief Operating Officer (COO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The Corporate Sustainability Team reports directly to the COO who reports climate-related matters more frequently than quarterly as they arise to the CEO.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Enerplus has stated short-term and long-term methane emissions intensity reduction targets and a long-term GHG emissions intensity reduction target, all of which exceed compliance requirements. As part of the corporate performance scorecard system, both our ESG targets and our compliance metrics are factored into bonus structure. All company employees, including C-suite and executives, benefit monetarily when Enerplus achieves its stated emissions intensity reduction targets and operations are compliant with all emissions and/or gas capture regulations. In 2022, Enerplus exceeded its internal short-term incentive program emissions intensity reduction target.

C1.3a

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

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target

Achievement of a climate-related target
Implementation of an emissions reduction initiative
Reduction in emissions intensity
Energy efficiency improvement

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Enerplus sets internal scope 1 & 2 emissions intensity reduction targets tracking to its long-term emissions intensity reduction target. As part of the corporate performance scorecard system, both our ESG targets and our compliance metrics are factored into bonus structure. All company employees, including executives, benefit monetarily when Enerplus achieves its stated emissions intensity reduction target and operations are compliant with all emissions and/or gas capture regulations. In 2022, Enerplus achieved its internal scope 1 & 2 emissions intensity reduction target and continued to progress towards its long-term target.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Our primary climate commitments are to reduce our emissions intensity and drive further efficiencies, and this incentive contributes to the prioritization of these incentives across the business.

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative
Reduction in emissions intensity
Energy efficiency improvement

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Enerplus sets internal scope 1 & 2 emissions intensity reduction targets tracking to its long-term emissions intensity reduction target. As part of the corporate performance scorecard system, both our ESG targets and our compliance metrics are factored into

bonus structure. All company employees, including executives, benefit monetarily when Enerplus achieves its stated emissions intensity reduction target and operations are compliant with all emissions and/or gas capture regulations. In 2022, Enerplus achieved its internal scope 1 & 2 emissions intensity reduction target and continued to progress towards its long-term target.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Our primary climate commitments are to reduce our emissions intensity and drive further efficiencies, and this incentive contributes to the prioritization of these incentives across the business.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative
Reduction in emissions intensity
Energy efficiency improvement

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Enerplus sets internal scope 1 & 2 emissions intensity reduction targets tracking to its long-term emissions intensity reduction target. As part of the corporate performance scorecard system, both our ESG targets and our compliance metrics are factored into bonus structure. All company employees, including executives, benefit monetarily when Enerplus achieves its stated emissions intensity reduction target and operations are compliant with all emissions and/or gas capture regulations. In 2022, Enerplus achieved its internal scope 1 & 2 emissions intensity reduction target and continued to progress towards its long-term target.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Our primary climate commitments are to reduce our emissions intensity and drive further efficiencies, and this incentive contributes to the prioritization of these incentives across the business.

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	5	Reflective of our operational budgeting cycle and planning schedule. Activities within this time horizon could include: • qualitative scenario analysis • internal scenario forecasting • reducing lower-cost emissions sources • compliance requirements • reporting methodology improvements, and • meter management planning
Medium-term	5	10	This timeframe is consistent with Enerplus' development planning timeframe and aligns with our extended term strategic and financial planning process. Activities within this time horizon could include: • evaluating technology pilots • supporting commercialization, and • striving to reduce higher-cost emissions sources
Long-term	10	30	This timeframe is beyond our current development timeframe which allows for us to evaluate our opportunities to link internal long-term planning to global climate management strategies.

C2.1b

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

Substantive impact is defined as impacting the economic viability of an operational area or facility, triggering a new evaluation of whether the operational area or facility is a net asset or liability. For example, if the cash flows no longer exceed the anticipated abandonment costs or the cumulative positives are less than the book value (up front capital), there may be net loss.

Metrics used to determine substantive impact include: proved reserves, annual production, net income, cashflow, fixed and variable operational costs, finding and development costs and capital efficiencies. These metrics are reviewed annually. Due to variable economic

parameters, specific thresholds used to determine if impacts are substantive vary by operational area.

Enerplus defines substantive as applicable to direct operations only.

C2.2

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

Value chain stage(s) covered

Direct operations
Upstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term

Description of process

During asset area reviews, climate-related risks, both likelihood and potential severity, are assessed using operational knowledge, current and upcoming regulatory requirements, and through conversations with peer organizations, vendors and regulators. Risk assessments are completed annually, however additional reviews take place throughout the year as conditions change. Climate risks are evaluated based on severity and frequency to determine the appropriate risk level and to determine the controls that need to be in place to manage the climate risk. Risks are responded to in a timely manner to ensure regulatory requirements and operational objectives are met. Opportunities are presented to senior management and are integrated into overall corporate strategy development.

Enerplus defines substantive impact as risks that are applicable to direct operations only. Substantive impacts affect the economic viability of an operational area or facility, triggering a new evaluation of whether the facility is a net asset or liability. For example, if the cash flows no longer exceed the anticipated abandonment costs or the cumulative positives are less than the book value (up front capital), there may be net loss.

Metrics used to determine substantive impact are reviewed at a minimum of annually. Due to variable economic parameters, specific thresholds used to determine substantive impact vary by operational area. Metrics used to determine substantive impact include:
•proved reserves

•annual production
•net income
•cashflow
•fixed and variable operational costs
•finding and development costs
•capital efficiencies

One example of substantive impact considered would be the lack of economically viable freshwater for hydraulic fracturing operations. If regional water shortages led to surface water withdrawal curtailments, water may have to be purchased from alternative vendors at additional cost. At some tipping point, the economics of the well might no longer make business sense. These evaluations are done throughout each projects lifecycle.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	All regulatory frameworks must be understood to ensure compliance. Internal company knowledge includes proactive awareness of all relevant regulations that must be complied with by all of our operating areas. The largest category of climate-related regulatory risks are emissions related and include emissions limits, gas capture requirements, and measurement and reporting requirements. Compliance is factored into all project planning and operational risk assessments.
Emerging regulation	Relevant, always included	All pending and published regulatory changes are reviewed to determine potential business impacts to Enerplus. Both routinely and when requested, feedback is provided either by Enerplus or through the several industry and trade associations we participate in, including: American Exploration & Production Council, Canadian Association of Petroleum Producers, Colorado Oil & Gas Association, North Dakota Petroleum Council, the Western Energy Alliance, and the Environmental Partnership. Potential regulatory changes are summarized and disseminated internally to heighten internal company knowledge, prepare for impending changes to operational practices, and to aid in providing informed feedback to regulators. Increased potential costs of compliance with emerging regulations is included in all project planning and operational risk assessments.

Technology	Relevant, always included	This risk type is considered relevant as it relates to equipment and technology used for climate-related emission regulations. For example, pending emissions regulations will mandate the upgrade and/or retrofit of several older technology equipment pieces. The costs of these technology upgrades are being factored into project planning and operational risk assessments.
Legal	Relevant, always included	This risk type is considered relevant but is deemed to be low risk as Enerplus is diligent in complying with all regulations, thereby limiting our exposure to climate-related legal risks.
Market	Relevant, always included	This risk type is considered relevant but is deemed to be low risk. The customers of Enerplus' produced oil and gas are midstream and/or refining companies. Long-term sales contracts are agreed upon early in project development.
Reputation	Relevant, always included	This risk type is considered relevant but is deemed to be low risk. Potential impacts to local communities are identified and mitigated within risk assessments. Enerplus proactively builds strong relationships with stakeholders in local communities impacted by our operations. In addition, Enerplus reports its impacts publicly through its ESG reporting and its external website, which is a form of reputation management.
Acute physical	Relevant, always included	Acute physical risks related to a changing climate could include such things as cyclones, fires and floods. These risks are included in all project planning, emergency response planning, and operational risk assessments.
Chronic physical	Relevant, always included	Chronic physical risks related to a changing climate could include localized risks as well as acute physical risks including fires, flooding, extreme temperatures and water scarcity, extended for greater durations of time. These risks are included in all project planning, emergency response planning, and operational risk assessments.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Other, please specify

Proposed regulation updates mandating changes to operational strategy

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

The EPA has released proposed regulation changes to OOOO (a, b, c) to address GHG pollutants in oil and gas operations. These regulations will create up front costs to implement new operational strategies to ensure continued compliance. The potential for deferred production to ensure compliance poses a potential financial risk to operators.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Cost of upgrade and retrofit equipment in combination with the potential for production deferrals.

Cost of response to risk

5,000,000

Description of response and explanation of cost calculation

Costs for upgrade and retrofit equipment to meet regulations.

Comment

The cost associated with these actions is dependent on the specific initiative chosen, but could range from a small equipment optimization project (i.e., $50,000) to a larger scale project such as the electrification of a particular field (i.e., millions of dollars).

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market

Changing customer behavior

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Changes in downstream customer behavior related to climate change could impact consumer demand for petroleum products. This is a risk to the upstream oil and gas industry as it would affect strategy for production volumes based on market supply and demand. Potential production curtailments mandated by regulatory bodies will also need to be considered and monitored.

Time horizon

Long-term

Likelihood

Very unlikely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

It is unknown what the financial implication of the changes in consumer behavior could be as it relates to climate change and petroleum product demand.

Cost of response to risk

0

Description of response and explanation of cost calculation

To mitigate this risk, Enerplus considers alternative business models for potential future implementation.

Comment

There are no management costs associated with this risk at this time.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Heavy precipitation (rain, hail, snow/ice)

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Extreme weather conditions such as flooding, drought, snow/ice from extreme changes in precipitation are a risk to Enerplus' operations. Flood conditions prevent access to some of our sites for normal operations or drilling and completion activities. Droughts can lead to conditions conducive to wildfires and this is a significant health and safety risk for our operations. Additionally, extreme snow and cold conditions can also affect the operation of equipment and access to sites.

Time horizon

Short-term

Likelihood

Unlikely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial implication of the changes in precipitation extremes are estimated as the total cost to reconstruct stormwater protection at all locations, meaning 400 pads at a cost of approximately $2,500 per pad.

Cost of response to risk

1,000,000

Description of response and explanation of cost calculation

The financial implication of the changes in precipitation extremes are estimated as the total cost to reconstruct stormwater protection at all locations, meaning 400 pads at a cost of $2,500 per pad.

Comment

To manage this risk, Enerplus ensures that proactive asset integrity programs are followed, routine facility inspections are performed, along with the diligent maintenance of area specific Emergency Response Plans and the continuous training of corporate and field staff on emergency response procedures.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

The federal government of Canada has set targets to reduce methane emissions from the oil and gas sector by 40-45% from 2012 levels by 2025, with a long-term goal of reducing methane emissions by at least 75% below 2012 levels by 2030. The provinces of Alberta, British Columbia and Saskatchewan have each developed plans to help the country meet the targets by introducing programs to regulate methane emissions from industrial operators. These programs vary by province and require a reduction of emissions set by mandating venting limits, equipment specific emission limits (equipment retrofits or replacement as needed), leak detection and repair (LDAR) requirements, increased reporting requirements, in addition to penalties for excess emissions. The cost to comply with the requirements will vary based on a number of factors such as asset inventory, new material costs, and access to the power grid.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Impact of the existing methane regulations to products and services was deemed low for 2022 due to the proportion of the business affected in relation to the corporate assets and divestment activity.

Cost of response to risk

0

Description of response and explanation of cost calculation

Methane regulations in Alberta mandate vent limits from specific equipment such as pneumatic devices, compressors and glycol dehydrators. The Federal government also has requirements to limit NOx from stationary spark-ignition gas fired engines, which is stipulated in the Multi-Sector Air Pollutant Regulation.

Comment

In 2022, Enerplus divested the majority of its Canadian operating assets de-escalating this risk factor from its previous importance and eliminating it going forward.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Other, please specify

Development and/or expansion of low emission goods and services

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

In 2022, Enerplus continued installing Vapor Recovery Units (VRUs) utilizing the best in-class design to maximize emissions reductions at recently completed high production pads. Enerplus VRUs capture waste gas from storage vessels and the second stage of separation.

In 2022, the installation of VRUs on 11 pads reduced emissions by 70,267 metric tonnes CO2e. Meters are used to measure the volume of gas injected into the sales line, and in 2022 we averaged 146 mcfd per site.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

300,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Depending on market conditions and contractual terms, Vapour Recovery Units may be an operating expense to the company.

Cost to realize opportunity

3,300,000

Strategy to realize opportunity and explanation of cost calculation

Costs are based on VRU installation, retrofit costs, and equipment rental.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Other, please specify

Development and/or expansion of low emission goods and services

Primary potential financial impact

Returns on investment in low-emission technology

Company-specific description

In 2022, Enerplus was granted matching funds to begin piloting a small scale carbon capture technology on natural gas generators which has the opportunity to create a 90% reduction in CO2e from power generation. This pilot is co-funded by the North Dakota Industrial Commission's - Clean Sustainable Energy Authority.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Costs will include rental rate and the costs to sequester the liquified carbon dioxide.

Cost to realize opportunity

3,000,000

Strategy to realize opportunity and explanation of cost calculation

Costs will include rental rate and the costs to sequester the liquified carbon dioxide.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Other, please specify

Development and/or expansion of low emission goods and services

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

In 2022, Enerplus partnered with service providers to modify one of our Bakken rigs to test a low emissions technology platform. The True 40 drill rig uses state of the art technology to reduce greenhouse gas, nitrogen oxide and particulate matter emissions. True 40 uses a combination of four technological shifts to operate as the cleanest rig in the basin, including:

- EPA rated Tier 4F Dynamic Gas Blending (DGB) engines
- Dual-fuel capability
- Integration with industrial battery technology
- Power management using True 40’s Smart Engine Management System

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Cost is comprised of True 40's day rate.

Cost to realize opportunity

548,000

Strategy to realize opportunity and explanation of cost calculation

Cost is comprised of True 40's day rate.

Comment

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Other, please specify

Development and/or expansion of low emission goods and services

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

In 2022, an Emissions Reduction Budget (ERB) was set aside with approximately $4.5 million of Enerplus' annual capital budget dedicated to implementing emissions reducing technologies. A cross-disciplinary technical team was formed to evaluate emissions reduction opportunities and prioritize project implementation.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The Emission Reduction Budget was set at approximately $4.5 million of Enerplus' annual capital budget in 2022.

Cost to realize opportunity

4,500,000

Strategy to realize opportunity and explanation of cost calculation

The Emission Reduction Budget was set at approximately $4.5 million of Enerplus' annual capital budget in 2022 and is dedicated to implementing emissions reduction technologies.

Comment

Identifier

Opp5

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Other, please specify

Development and/or expansion of low emission goods and services

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

An internal offsite collaboration event was held in October 2022 to educate personnel on emissions sources and discuss methods of abatement. It generated 55 emissions reduction ideas. This event had representation from every department in the company which has any potential impact on emissions. The cultural impact from the event emphasized the importance of emissions management while reiterating that there is a separate established funding set aside to help develop emerging technology to reduce emissions.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Cost to realize the 55 emissions reduction ideas is under assessment.

Cost to realize opportunity

50,000

Strategy to realize opportunity and explanation of cost calculation

Cost of the event includes travel and lodging for employees only.

Comment

Identifier
Opp6

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Other, please specify
Beneficial use

Primary potential financial impact
Reduced indirect (operating) costs

Company-specific description
Remote data processing using captured 2-phase high pressure gas that is normally routed to flare at Enerplus' few remaining facilities with no gas pipeline takeaway. The gas is captured and used as fuel gas to run portable remote data processing equipment. This reduces both VOCs and CO2e emissions.

Time horizon
Medium-term

Likelihood
Virtually certain

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
0

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

Comment

C3. Business Strategy

C3.1

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

Row 1

Climate transition plan

No, our strategy has been influenced by climate-related risks and opportunities, but we do not plan to develop a climate transition plan within two years

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

Our current operational plan relies on achieving our 2030 scope 1 and 2 emissions intensity reduction and methane intensity reduction targets. These targets fall within our scope of operational control and within our planned operational time horizon. At this time, targets within the oil and gas industry are excluded from verification within the Science Based Targets Initiative (SBTi), therefore making it difficult to ensure our targets are aligned. Climate-related risks and opportunities have influenced our strategy, as demonstrated by our existing scope 1 and 2 emissions intensity and methane intensity reduction targets. We are committed to reducing our environmental footprint and are focusing on the climate-related risks and opportunities within the sphere of our operational control.

C3.2

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

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA STEPS	Company-wide		Reviewed to understand incorporation into corporate planning and future pricing

(previously IEA NPS)			projections to underlie market fundamentals.
Transition scenarios IEA APS	Company-wide		Reviewed to understand incorporation into corporate planning and future pricing projections to underlie market fundamentals.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

We are focusing our efforts on qualitative climate-related scenario analysis while conducting internal quantitative scenario analysis via an internal forecasting tool which focuses on understanding anticipated impacts to our areas of operations through qualitative analysis. We are continuing to educate ourselves in the relevant quantitative applications beyond the capabilities of our internal forecasting tool, and have engaged with external experts in the field.

Results of the climate-related scenario analysis with respect to the focal questions

Internal quantitative analysis review has shown that based upon the location of our assets, we do not anticipate that our operations are at any greater physical risk than those of similar on-shore oil and gas producers.

C3.3

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

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Not evaluated	
Supply chain and/or value chain	Not evaluated	
Investment in R&D	Yes	In 2022, Enerplus' Emissions Reduction Budget (ERB) increased to $4.5 million. A multi-disciplinary technical team

		was created to review all emissions sources and to innovate solutions to help meet our emission reduction goals. Additionally, an internal offsite was held gathering multi-disciplinary employees from across the company to further generate ideas and promote emissions education and understanding.
Operations	Yes	In areas with existing borrow pits, heavy rainfall seasons can cause the pits to overflow, saturating the surrounding land and deteriorating nearby roads. Enerplus has strategically applied for approval to use the water from the borrow pits in Alberta as an offset source to drilling water wells or withdrawing from rivers. This opportunity is beneficial to the environment as well as providing a cleaner source of water for injection purposes. Water availability related to drought could have future impacts in Colorado, although the risk is minimal. In 2020, Enerplus re-designed completions strategies allowing for the use of produced water to be reused during completion activities. This strategy reduces the need for freshwater, and continues to be employed to an even greater degree in our North Dakota operations in 2022.

C3.4

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

	Financial planning elements that have been influenced	Description of influence
Row 1	Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital	An example of Enerplus' financial planning being influenced occurred in 2022 when Enerplus successfully revised two of its credit facilities into Sustainability-Linked Credit Facilities, which hinge on the organizations ability to meet its scope 1 & 2 emissions intensity reduction target, freshwater reduction per completions target, and Lost Time Injury Frequency (LTIF) reduction target. Additionally, operational costs have been affected by emissions reduction projects through the Emissions Reduction Budget (ERB). Projects are evaluated based on their ability to meet basic economic hurdles to implementation. Indirect costs have incurred from increasing accuracy with emissions tracking through the implementation of an emissions inventory with

		Intelex ACTs. We are continuing to refine our data management efforts.

C3.5

(C3.5) 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
Row 1	No, and we do not plan to in the next two years

C4. Targets and performance

C4.1

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

Intensity target

C4.1b

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

Target reference number

Int 1

Is this a science-based target?

No, and we do not anticipate setting one in the next two years

Target ambition

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Intensity metric

Metric tons CO2e per barrel of oil equivalent (BOE)

Base year

2021

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

0.0293753241

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

0.0037262089

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

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

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

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

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

0.0317269011

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

100

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

100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

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

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

100

Target year

2030

Targeted reduction from base year (%)

35

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

0.0206224857

% change anticipated in absolute Scope 1+2 emissions

14

% change anticipated in absolute Scope 3 emissions

0

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

0.0248500469

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

0.0036837526

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

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

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

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

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

0.0285337995

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

28.7552427507

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Our 2030 emissions intensity reduction target covers all of our scope 1 & 2 emissions. Our scope 2 emissions are calculated utilizing a location-based methodology and all come from purchased electricity.

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

Our plan is to continue to work on abating emission sources from flaring, engines, and combustion through increased awareness of emissions sources across the organization, increased efficiencies, improved planning and processes. The emissions reduction initiatives which have contributed the most to progressing towards our target include:
•Vapour Recovery Units
•midstream planning
•flowback planning
•engine efficiency
•electrification
•flaring mitigation
•pneumatic conversions

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

C4.2

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

Target(s) to reduce methane emissions

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2022

Target coverage

Company-wide

Target type: absolute or intensity

Intensity

Target type: category & Metric (target numerator if reporting an intensity target)

Methane reduction target

Total methane emissions in CO2e

Target denominator (intensity targets only)

boe

Base year

2021

Figure or percentage in base year

0.0000683004

Target year

2025

Figure or percentage in target year

0.0000478103

Figure or percentage in reporting year

0.0000654848

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

13.7412701744

Target status in reporting year

Underway

Is this target part of an emissions target?

While this target is a co-benefit to our overall emissions intensity reduction target, this target is a separate reduction target.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

This target covers the entirety of our operations within our operational control. There are no exclusions within this target.

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

We plan to continue replacing intermittent bleed pneumatics in the assets we acquired in 2021, and are continuing to significantly reduce our flaring.

List the actions which contributed most to achieving this target

Target reference number

Oth 2

Year target was set

2022

Target coverage

Company-wide

Target type: absolute or intensity

Intensity

Target type: category & Metric (target numerator if reporting an intensity target)

Methane reduction target

Total methane emissions in CO2e

Target denominator (intensity targets only)

boe

Base year

2021

Figure or percentage in base year

0.0000683004

Target year

2030

Figure or percentage in target year

0.0000341502

Figure or percentage in reporting year

0.0000654848

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

8.2447540571

Target status in reporting year

Underway

Is this target part of an emissions target?

While this target is a co-benefit to our overall emissions intensity reduction target, this target is a separate reduction target.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

This target covers the entirety of our operations within our operational control. There are no exclusions within this target.

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

We plan to continue replacing intermittent bleed pneumatics in the assets we acquired in 2021, and are continuing to significantly reduce our flaring.

List the actions which contributed most to achieving this target

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	55	
To be implemented*	4	20,000
Implementation commenced*	1	0
Implemented*	9	89,351
Not to be implemented	41	

C4.3b

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

Initiative category & Initiative type

Non-energy industrial process emissions reductions

Process material efficiency

Estimated annual CO2e savings (metric tonnes CO2e)

70,267

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

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
400,000

Investment required (unit currency – as specified in C0.4)
3,300,000

Payback period
4-10 years

Estimated lifetime of the initiative
6-10 years

Comment
Install Vapor Recovery Units (VRUs) to storage vessels and second stage of separation to capture low pressure gas for compression into the sales line. Market conditions impacted the economics of this project in 2022.

Initiative category & Initiative type
Fugitive emissions reductions
Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)
1,600

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
1,000,000

Payback period
No payback

Estimated lifetime of the initiative
1-2 years

Comment
Replaced intermittent bleed pneumatic devices with instrument air devices.

Initiative category & Initiative type
Energy efficiency in production processes

Electrification

Estimated annual CO2e savings (metric tonnes CO2e)

6,695

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

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

720,000

Payback period

No payback

Estimated lifetime of the initiative

3-5 years

Comment

Tie-in new production sites to line power rather than using on-site natural gas driven generators. This practice reduces natural gas combustion in favour of lower emissions line power.

Initiative category & Initiative type

Energy efficiency in production processes
Fuel switch

Estimated annual CO2e savings (metric tonnes CO2e)

1,819

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

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

548,000

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

In 2022, Enerplus partnered with service providers to modify one of our Bakken rigs to test a low emissions technology platform. The True 40 drill rig uses state of the art technology to reduce greenhouse gas, nitrogen oxide and particulate matter emissions. True 40 uses a combination of four technological shifts to operate as the cleanest rig in the basin, including:
• EPA rated Tier 4F Dynamic Gas Blending (DGB) engines
• Dual-fuel capability
• Integration with industrial battery technology
• Power management using True 40's Smart Engine Management System

---

Initiative category & Initiative type

Company policy or behavioral change
Supplier engagement

Estimated annual CO2e savings (metric tonnes CO2e)

0

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

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

28,000,000

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

In combination with other Bakken operators, Enerplus is funding significant upgrades to the local electrical coop distribution system. This will allow for our equipment to be tied to grid power. Currently all locations are planned to be on grid power by 2025. In addition to supporting our business needs, this project increases power capacity and redundancy creating a more resilient grid for the community on the Fort Berthold Indian Reservation.

Initiative category & Initiative type

Company policy or behavioral change
Resource efficiency

Estimated annual CO2e savings (metric tonnes CO2e)

0

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

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

50,000

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

Hosted offsite strategy session with over 50 key personal from all aspects of the business to educate on emissions sources and develop strategic plans to reduce emissions, maximize efficiencies and optimize processes.

Initiative category & Initiative type

Energy efficiency in production processes
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

0

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

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

0

Payback period
No payback

Estimated lifetime of the initiative
Ongoing

Comment
Optimized trucking routes to salt water disposal wells to reduce diesel usage and maximize efficiency.

Initiative category & Initiative type
Waste reduction and material circularity
Product/component/material reuse

Estimated annual CO2e savings (metric tonnes CO2e)
2,606

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
0

Payback period
No payback

Estimated lifetime of the initiative
3-5 years

Comment
Utilized gas that would otherwise be flared to conduct remote data processing.

Initiative category & Initiative type
Waste reduction and material circularity
Product/component/material reuse

Estimated annual CO2e savings (metric tonnes CO2e)
3,942

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
200,000

Investment required (unit currency – as specified in C0.4)
840,000

Payback period
No payback

Estimated lifetime of the initiative
3-5 years

Comment
Use natural gas liquid (NGL) skids in process equipment to remove liquid hydrocarbons and reduce flaring.

Initiative category & Initiative type
Waste reduction and material circularity
Product/component/material reuse

Estimated annual CO2e savings (metric tonnes CO2e)
2,422

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
2,960,021

Investment required (unit currency – as specified in C0.4)
1,369,978

Payback period
No payback

Estimated lifetime of the initiative
3-5 years

Comment
Use compressed natural gas (CNG) instead of diesel fuel during completions operations.

C4.3c

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

Method	Comment
Employee engagement	All employees are encouraged to bring forward efficiency and emissions reductions ideas utilizing internal communication platforms, team functions focused on idea generation, and cost efficiency sponsored internal challenges. In addition, we have a dedicated Emissions Reduction Budget (ERB) based off of our proposed goal in 2020 which drives the funding of additional emissions reduction objectives across the company. The ERB was valued at approximately $4.5 million dollars in 2022.
Dedicated budget for other emissions reduction activities	Emission Reduction Budget (ERB) of $4.5 million dollars in 2022 which is used to reduce emissions and implement new technologies.
Internal price on carbon	In 2022, Enerplus' internal shadow price on carbon was $42.
Compliance with regulatory requirements/standards	Enerplus ensures that our operations are compliant with regulatory requirements in every jurisdiction in which we operate. An increase in proposed regulations impacting our US operations is driving additional cross-functional synergies to ensure preparedness for operational changes. New operating standards, equipment requirements and retrofits, leak detection and repair (LDAR) processes and controlling vent limits are some of the practices implemented to support emission reduction activities.

C4.5

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

No

C-OG4.6

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

Methane emissions are reduced or eliminated in Enerplus' operations where it is economically viable and technically feasible. Early methane reduction efforts included significant updates to lock-down thief hatches. Leak detection and repair programs are implemented at all operational locations to actively identify fugitive emissions. Vapour recovery units are installed on tanks and intermediate pressure separators to further capture vented gas. In 2022, Enerplus continued to replaced intermediate pneumatic devices with low bleed pneumatics or instrument air devices across our 2021 acquisitions. Detailed equipment inventory and vent leak rates were collected

and quantified to better understand and support methane emissions reduction projects and opportunities.

C-OG4.7

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

Yes

C-OG4.7a

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

Enerplus' North Dakota operating facilities have LDAR survey's completed twice a year using an optical gas imaging camera. Enerplus' North Dakota operating facilities are under a specific program. Fugitive emission surveys are conducted at the sites according to the program qualification they fall under. No less than two optical gas imaging (OGI) surveys are conducted on each facility a year for a total of 185 sites voluntarily inspected semi-annually. 32 sites were OGI surveyed monthly and 89 sites were OGI surveyed quarterly. Additionally, audio, visual, olfactory (AVO) surveys are conducted at each facility monthly to detect fugitive emissions. In Colorado, inspections are conducted monthly.

In 2022, Enerplus' Canadian operations followed the Federal government's requirement for leak detection and repair (LDAR) as prescribed by the Alberta Energy Regulator's Directive 060 Upstream Petroleum Industry Flaring, Incinerating and Venting and by the Saskatchewan Ministry of Energy and Resources PNG036 Flaring and Venting Requirements. In Alberta, tri-annual fugitive emissions surveys are required at: sweet gas plants, sweet compressor stations, liquid hydrocarbon storage tanks with vent gas control, and produced water storage tanks with vent gas control. Annual fugitive emissions surveys are required at: sour gas plants, sour compressor stations, battery and associated satellite facilities, and injection/disposal facilities. Well sites are required to be screened annually. In Saskatchewan, semi-annual fugitive emissions surveys are required at: multi-well gas batteries, single-well gas batteries, sweet gas plants, sour gas plants, and gas gathering systems.

All leaks detected are fixed immediately unless they require an operational shut-down. Leaks that require an operational shut-down are fixed during the next upcoming turnaround.

C-OG4.8

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

Flaring is relevant to Enerplus operations. Our goal is to eliminate routine flaring in all cases where it is economically viable and technically feasible to do so. Flaring of natural gas occurs

for many reasons, including a lack of sufficient pipeline takeaway capacity. As pipeline infrastructure catches up to well development, pipeline capacity typically increases, which in turn decreases the overall need to flare. We understand that in order to achieve our long-term emissions intensity reduction target, we will need to reduce our routine flaring and are currently working to do so through operational planning, innovating processes, and internal commitments.

C5. Emissions methodology

C5.1

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

No

C5.1a

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

Row 1

Has there been a structural change?

Yes, a divestment

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

In 2022, Enerplus divested of substantially all of its operational Canadian assets.

Details of structural change(s), including completion dates

The first sale of Canadian assets, including southern and northern Alberta operations, closed in October 2022. The sale of the majority of our remaining Canadian assets, including our Saskatchewan and eastern Alberta operations, closed in December 2022.

C5.1b

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

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the impact does not meet our significance threshold	In cases of acquisitions and divestitures, Enerplus adjusts its base year emissions if the change exceeds 10% of the original base year emissions threshold.	No

C5.2

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

Scope 1

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

941,897

Comment

Scope 1 emissions from Canada and US operations in 2021.

Scope 2 (location-based)

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

119,478

Comment

Scope 2 emissions from Canada and US operations in 2021.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not applicable

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 6: Business travel

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

12.468

Comment

Limited to air travel as booked by our corporate travel agent

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not relevant to Enerplus

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not relevant to Enerplus

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not calculated at this time

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009
Canadian Association of Petroleum Producers, Calculating Greenhouse Gas Emissions, 2003
IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2003
IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
838,199

Start date
January 1, 2022

End date
December 31, 2022

Comment
Emissions from assets owned and operated in the 2022 calendar year.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
941,897

Start date
January 1, 2021

End date
December 31, 2021

Comment
Emissions from assets owned and operated in the 2021 calendar year.

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)
628,686

Start date
January 1, 2020

End date
December 31, 2020

Comment
Emissions from assets owned and operated in the 2020 calendar year.

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

954,520

Start date

January 1, 2019

End date

December 31, 2019

Comment

Emissions from assets owned and operated in the 2019 calendar year.

Past year 4

Gross global Scope 1 emissions (metric tons CO2e)

805,248

Start date

January 1, 2018

End date

December 31, 2018

Comment

Emissions from assets owned and operated in the 2018 calendar year.

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

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

Comment

Scope 2 emissions are calculated based on electricity consumption and area based electricity emission factors.

C6.3

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

Reporting year

Scope 2, location-based

124,254

Start date

January 1, 2022

End date

December 31, 2022

Comment

Emissions from Canada and US operations in 2022. Emissions are calculated based on electricity consumption and area specific electricity emission factors.

Past year 1

Scope 2, location-based

119,478

Start date

January 1, 2021

End date

December 31, 2021

Comment

Emissions from Canada and US operations in 2021. Emissions are calculated based on electricity consumption and area specific electricity emission factors.

Past year 2

Scope 2, location-based

96,698

Start date

January 1, 2020

End date

December 31, 2020

Comment

Emissions from Canada and US operations in 2020. Emissions are calculated based on electricity consumption and area specific electricity emission factors.

Past year 3

Scope 2, location-based

111,734

Start date

January 1, 2019

End date

December 31, 2019

Comment

Emissions from Canada and US operations in 2019. Emissions are calculated based on electricity consumption and area specific electricity emission factors.

Past year 4

Scope 2, location-based

123,331

Start date

January 1, 2018

End date

December 31, 2018

Comment

Emissions from Canada and US operations in 2018. Emissions are calculated based on electricity consumption and area specific electricity emission factors.

C6.4

(C6.4) 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?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions

Scope 3, multiple categories

Scope(s) or Scope 3 category(ies)

Scope 3: Purchased goods and services
Scope 3: Capital goods
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Employee commuting
Scope 3: Upstream leased assets
Scope 3: Downstream transportation and distribution
Scope 3: Processing of sold products

Scope 3: Use of sold products
Scope 3: End-of-life treatment of sold products

Relevance of Scope 1 emissions from this source

Relevance of location-based Scope 2 emissions from this source

Relevance of market-based Scope 2 emissions from this source

Relevance of Scope 3 emissions from this source
Emissions are relevant but not yet calculated

Date of completion of acquisition or merger

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Estimated percentage of total Scope 3 emissions this excluded source represents
95

Explain why this source is excluded
Most scope 3 emissions are deemed relevant but not yet calculated.

Explain how you estimated the percentage of emissions this excluded source represents
Estimation

C6.5

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

Purchased goods and services

Evaluation status
Relevant, not yet calculated

Please explain
We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Capital goods

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

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

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

66.87

Emissions calculation methodology

Other, please specify

CO2 ICAO Based Calculation

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

100

Please explain

Calculation reflects all air travel related emissions as booked by our travel agent. 100% of information provided comes from our travel agent (supplier).

Employee commuting

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Upstream leased assets

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Downstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Processing of sold products

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Use of sold products

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Downstream leased assets

Evaluation status

Relevant, not yet calculated

Please explain

We are working to better understand scope 3 emissions calculations at this time with aspirations of calculating scope 3 emissions for internal use and continued monitoring of the disclosure space in the coming years.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Enerplus does not have franchises

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Enerplus does not have investments

Other (upstream)

Evaluation status

Not evaluated

Please explain

Other (downstream)

Evaluation status

Not evaluated

Please explain

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2021

End date

December 31, 2021

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

12.468

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Information presented is supplied by our travel agent and reflects all corporate air travel emissions as booked by this vendor for the 2021 calendar year.

Past year 2

Start date

January 1, 2020

End date

December 31, 2020

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

11.79

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Information presented is supplied by our travel agent and reflects all corporate air travel emissions as booked by this vendor for the 2020 calendar year.

Past year 3

Start date

January 1, 2019

End date

December 31, 2019

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

72.95

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Information presented is supplied by our travel agent and reflects all corporate air travel emissions as booked by this vendor for the 2019 calendar year.

Past year 4

Start date

January 1, 2018

End date

December 31, 2018

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

107

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Information presented is supplied by our travel agent and reflects all corporate air travel emissions as booked by this vendor for the 2018 calendar year.

C6.7

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

No

C6.10

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

Intensity figure

0.0004225067

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

962,453

Metric denominator

unit total revenue

Metric denominator: Unit total

2,277,959,000

Scope 2 figure used

Location-based

% change from previous year

39

Direction of change

Decreased

Reason(s) for change

Please explain

Denomination is USD and is based on gross operated net revenue before royalty. In 2022, Enerplus implemented substantial emissions reduction measures, resulting in lower absolute emissions. Larger revenue is primarily due to constructive commodity pricing and increased production. This reduction in emissions and emissions intensity has improved our ability to capture our resource.

Intensity figure

0.0285338

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

962,453

Metric denominator

barrel of oil equivalent (BOE)

Metric denominator: Unit total

33,730,278

Scope 2 figure used

Location-based

% change from previous year

13.8

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities
Change in output

Please explain

In 2022, Enerplus increased production partially due to a full year of production from acquired assets in combination with our successful drilling program. The increase in production contributed to a larger denominator, while the emissions reductions resulted in a smaller numerator. As a result, we achieved a significant decrease in our corporate intensity, reflecting Enerplus' commitment to both growth and environmental stewardship.

C-OG6.12

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

Unit of hydrocarbon category (denominator)

Other, please specify

Barrels of oil

Metric tons CO2e from hydrocarbon category per unit specified

0.02

% change from previous year

15

Direction of change

Decreased

Reason for change

The intensity per BOE demonstrated a decline of 14% in comparison to the preceding reporting year in 2021. In 2022, Enerplus increased production partially due to a full year of production from acquired assets in combination with our successful drilling program. The increase in production contributed to a larger denominator, while the emissions reductions resulted in a smaller numerator. As a result, we achieved a significant decrease in our corporate intensity, reflecting Enerplus' commitment to both growth and environmental stewardship.

Comment

C-OG6.13

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

Oil and gas business division

Upstream

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

0.243

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

0.059

Details of methodology

Calculation process includes methane reported as a mass (metric tonnes), gas volumes reported in E3m3, and total hydrocarbons based on a volumetric oil equivalent as the denominator.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	781,243	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	2,209	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	6	IPCC Fourth Assessment Report (AR4 - 100 year)

C-OG7.1b

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

Emissions category

Combustion (excluding flaring)

Value chain

Upstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

314,211

Gross Scope 1 methane emissions (metric tons CH4)

279

Total gross Scope 1 emissions (metric tons CO2e)

322,679

Comment

Decimal places may cause slight discrepancy when applying GWP. Enerplus' publicly reported emissions data rounds the value to a whole number.

Emissions category

Flaring

Value chain

Upstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

466,994

Gross Scope 1 methane emissions (metric tons CH4)

1,343

Total gross Scope 1 emissions (metric tons CO2e)

500,801

Comment

Decimal places may cause slight discrepancy when applying GWP. Enerplus' publicly reported emissions data rounds the value to a whole number.

Emissions category

Venting

Value chain

Upstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

23

Gross Scope 1 methane emissions (metric tons CH4)

506

Total gross Scope 1 emissions (metric tons CO2e)

12,668

Comment

Decimal places may cause slight discrepancy when applying GWP. Enerplus' publicly reported emissions data rounds the value to a whole number.

Emissions category
Fugitives

Value chain
Upstream

Product
Gas

Gross Scope 1 CO2 emissions (metric tons CO2)
15

Gross Scope 1 methane emissions (metric tons CH4)
81

Total gross Scope 1 emissions (metric tons CO2e)
2,050

Comment
Decimal places may cause slight discrepancy when applying GWP. Enerplus' publicly reported emissions data rounds the value to a whole number.

C7.2

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

Country/area/region	Scope 1 emissions (metric tons CO2e)
Canada	56,090
United States of America	782,109

C7.3

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

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Alberta, Canada	44,186
Saskatchewan, Canada	11,904
North Dakota, US	773,967
Colorado, US	8,141

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

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

	Gross Scope 1 emissions, metric tons CO2e	Comment
Oil and gas production activities (upstream)	838,199	
Oil and gas production activities (midstream)		
Oil and gas production activities (downstream)		

C7.5

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

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Canada	64,768	
United States of America	59,486	

C7.6

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

By business division

C7.6a

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

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Alberta, Canada	51,495	
Saskatchewan, Canada	13,273	
North Dakota, US	59,486	
Colorado, US	0	

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

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

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

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Oil and gas production activities (upstream)	124,254		
Oil and gas production activities (midstream)			
Oil and gas production activities (downstream)			

C7.9

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

Decreased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption				
Other emissions	71,867	Decreased	6.54	Enerplus installed vapor recovery units (VRUs) to storage vessels and second

reduction activities				stage of separation to capture excess gas to be compressed into the sales line. Additionally, the replacement of intermittent pneumatic devices with instrument air devices contributed to emissions reductions in 2022.
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology	18,541	Decreased	1.69	Enerplus assessed the emissions factors we use for intermediate pressure separators and determined our gas to oil ratio was lower than reported in previous years. Therefore, we are lowering the emissions from the source category. Additionally, Enerplus revised our generator fuel use estimation methodology to use actual fuel usage instead of maximum potential consumption metrics.
Change in boundary				
Change in physical operating conditions	8,514	Decreased	0.77	Changes in physical operating conditions can be attributable to tying in new production sites to line power in lieu of utilizing on site natural gas driven generators. This shifts our emissions from natural gas combustion to scope 2 emissions. Additionally, in 2022, Enerplus partnered with service providers to modify one of our Bakken rigs to test a low emissions technology platform. The True 40 drill rig uses state of the art technology to reduce greenhouse gas, nitrogen oxide and particulate matter emissions. True 40 uses a combination of four technological shifts to operate as the cleanest rig in the basin, including: • EPA rated Tier 4F Dynamic Gas Blending (DGB) engines

				• Dual-fuel capability • Integration with industrial battery technology • Power management using True 40's Smart Engine Management System
Unidentified				
Other				

C7.9b

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

Location-based

C8. Energy

C8.1

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

More than 5% but less than or equal to 10%

C8.2

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

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	Unable to confirm heating value		1,819,207	1,819,207
Consumption of purchased or acquired electricity			238,942	238,942
Consumption of self-generated non-fuel renewable energy				
Total energy consumption			2,058,149	2,058,149

C8.2b

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

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

C8.2c

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

Sustainable biomass

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Comment

Other biomass

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Comment

Coal

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Comment

Oil

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Comment

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

1,819,207

MWh fuel consumed for self-generation of electricity

1,455,366

MWh fuel consumed for self-generation of heat

363,841

Comment

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

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

110,038

MWh fuel consumed for self-generation of electricity

88,031

MWh fuel consumed for self-generation of heat

22,007

Comment

Propane and diesel fuels consumed and reported by operated assets.

Total fuel

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Comment

C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	1,796,549	1,796,549		
Heat				
Steam				
Cooling				

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
United States of America

Consumption of purchased electricity (MWh)
137,046

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

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

Country/area
Canada

Consumption of purchased electricity (MWh)
101,896

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

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

C9. Additional metrics

C9.1

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

C-OG9.2a

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

	In-year net production	Comment
Crude oil and condensate, million barrels	18.98	
Natural gas liquids, million barrels	3.53	
Oil sands, million barrels (includes bitumen and synthetic crude)	0	
Natural gas, billion cubic feet	84.59	

C-OG9.2b

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

All reserves information presented herein has been prepared in accordance with NI 51-101 and is presented December 31, 2022 unless otherwise stated. The Reserves Life Indices (RLI) are based upon year-end proved and proved plus probable reserves divided by the following year's proved and proved plus probable production volumes as forecast in the independent reserves engineering reports.

C-OG9.2c

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

	Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)	Comment
Row 1	483.09		630.22	3P estimate not prepared

C-OG9.2d

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

	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Crude oil/ condensate/ natural gas liquids	62		59	3P estimate not prepared

Natural gas	38		41	3P estimate not prepared
Oil sands (includes bitumen and synthetic crude)	0	0	0	Enerplus does not operate oil sands assets

C-OG9.2e

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

Development type
Onshore

In-year net production (%)
0

Net proved reserves (1P) (%)
0

Net proved + probable reserves (2P) (%)
0

Net proved + probable + possible reserves (3P) (%)
0

Net total resource base (%)
0

Comment
3P estimate not prepared

Development type
Tight/shale

In-year net production (%)
100

Net proved reserves (1P) (%)
100

Net proved + probable reserves (2P) (%)
100

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

Net total resource base (%)

100

Comment

3P estimate not prepared

C-OG9.5a/C-CO9.5a

(C-OG9.5a/C-CO9.5a) Break down, by fossil fuel expansion activity, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

	CAPEX in the reporting year for this expansion activity (unit currency as selected in C0.4)	CAPEX in the reporting year for this expansion activity as % of total CAPEX in the reporting year	CAPEX planned over the next 5 years for this expansion activity as % of total CAPEX planned over the next 5 years	Explain your CAPEX calculations, including any assumptions
Exploration of new oil fields				
Exploration of new natural gas fields				
Expansion of existing oil fields	378,068,802	86.69	85	We calculate CAPEX in line with US GAAP accounting standards
Expansion of existing natural gas fields	58,071,978	13.31	15	We calculate CAPEX in line with US GAAP accounting standards

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

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

	Investment in low-carbon R&D	Comment
Row 1	Yes	Enerplus invests in and supports low carbon research and development.

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

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

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)	Average % of total R&D investment planned over the next 5 years	Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Carbon capture, utilization, and storage (CCUS)	Applied research and development	0	0	40	We have committed to testing a small-scale, modular carbon capture technology that has the potential to reduce a material amount of our total emissions.
Other, please specify Geothermal	Applied research and development	0	0	14	Enerplus received a second matching grant fund from the North Dakota Industrial Commission's - Clean Sustainable Energy Authority to pilot a geothermal energy skid. Enerplus currently uses water chiller skids to meet pipeline temperature specifications and generates on-site power using natural gas fired generators. This geothermal energy skid is intended to replace the current water chiller and generate geothermal power reducing combustion from our generators.

Advanced monitoring techniques	Applied research and development	0	0	14	Testing advanced monitoring to validate data associated with gas flaring.

C-OG9.7

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

56

C10. Verification

C10.1

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

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

C10.1a

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

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

ERM CVS Assurance Report for Enerplus CDP 2023_25Jul2023.pdf

Page/ section reference

Entire statement

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Third party verification/assurance underway

Attach the statement

Verification Report_Enerplus 2022 TIER Aggregate Facility.pdf

Page/ section reference

Please see Appendix E of the attached document

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

5

C10.1b

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

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

ERM CVS Assurance Report for Enerplus CDP 2023_25Jul2023.pdf

Page/ section reference

Entire statement

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.2

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

No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

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

Yes

C11.1a

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

Alberta TIER - ETS

Saskatchewan OBPS - ETS

C11.1b

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

Alberta TIER - ETS

% of Scope 1 emissions covered by the ETS

5.32

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

40,543

Allowances purchased

1,248

Verified Scope 1 emissions in metric tons CO2e

43,662

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

TIER registered owner of facility on January 1 of the year is responsible for emissions for the entire year, regardless of ownership change (divestment) throughout the year. Enerplus exceeded allowable emissions by 3,119 tonnes of CO2e, however Enerplus has earned Alberta Carbon Credits from a registered Pneumatic Device Retrofit project and applied 1,871 credits towards the 2022 compliance obligation, therefore reducing the amount of allowances required to be purchased.

Saskatchewan OBPS - ETS

% of Scope 1 emissions covered by the ETS

1.45

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

737

Allowances purchased

72

Verified Scope 1 emissions in metric tons CO2e

875

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

In 2022, the emissions allowance was exceeded by 138 tonnes CO2e, however Enerplus has earned 66 Performance Credits from the previous year which will be used for the 2022 compliance obligation, therefore reducing the amount of allowance required to be purchased.

C11.1d

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

Enerplus proactively monitors current and proposed future regulations to anticipate the impacts and ensure compliance with all applicable regulations in its areas of operations. Employees are encouraged to submit emissions reduction project ideas for funding. This strategy leads to innovative brainstorming ideas from all levels of the organization from field staff to executives. This program goes above and beyond any active or anticipated regulations as daily operational efficiencies are also reviewed for potential to decrease stationary fuel combustion emissions which are currently regulated by the ETS programs, in addition to the flaring emissions which will be part of the regulated emissions in 2023. Enerplus also participates in funding programs that offer incentives to execute emissions reduction projects that would otherwise not be financially economical. Funding programs offered by government institutions and associations in the United States and Canada allow for added opportunities to further invest in solutions to reduce emissions.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

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

Yes

C11.3a

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

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme

Alignment with the price of a carbon tax
Cost of required measures to achieve emissions reduction targets

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations
Stakeholder expectations

Scope(s) covered

Scope 1

Pricing approach used – spatial variance

Differentiated

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

As we use an evolutionary pricing model, we understand that the price develops over time. The Federal Fuel Charge tax rate in Canada is $50 a tonne in 2022.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

42

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

42

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Operations
Risk management
Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

A regulatory requirement.

Type of internal carbon price

Internal fee

How the price is determined

Cost of required measures to achieve emissions reduction targets

Objective(s) for implementing this internal carbon price

Drive low-carbon investment
Identify and seize low-carbon opportunities
Set a carbon offset budget

Scope(s) covered

Scope 1

Pricing approach used – spatial variance

Differentiated

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

As technology improves or efficiencies are gained, we see cost of abatement shifting downwards.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

0

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

100

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Operations
Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes

No

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

We use our internal carbon price to understand the cost to abate emissions.

C12. Engagement

C12.1

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

Yes, our suppliers

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect GHG emissions data at least annually from suppliers
Collect climate-related risk and opportunity information at least annually from suppliers
Collect other climate related information at least annually from suppliers

% of suppliers by number

90

% total procurement spend (direct and indirect)

95

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

0

Rationale for the coverage of your engagement

We are able to collect information through the sustainability questionnaire in ISNetworld, our supplier pre-qualification tool. This questionnaire is passed on to all of our suppliers in the system for completion annually. The questionnaire includes questions on the following topics:
-Environmental - General
-Environmental - Land & Water
-Environmental - Waste, Environmental
-Emissions, Environmental - Energy, Ethics, and Human Rights

In addition, we request specific 'initiative-based' information from suppliers as required by governments or agencies.

Impact of engagement, including measures of success

Enerplus reviews the sustainability questionnaire responses. Measures of success include the completion of the questionnaire, and timely/accurate reporting of any other information requests for specific initiatives, as requested.

Comment

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Run a campaign to encourage innovation to reduce climate impacts on products and services
Invest jointly with suppliers in R&D of relevant low-carbon technologies

% of suppliers by number

1

% total procurement spend (direct and indirect)

3

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

0

Rationale for the coverage of your engagement

Engagement and collaboration with suppliers on new innovative technologies in relation to climate change is important to Enerplus. Enerplus plays a role in communicating the importance of climate change issues and adheres to reporting and regulatory requirements. Enerplus has long-term scope 1 and 2 emissions intensity reductions targets. We engage with our suppliers, communicate these targets, and seek to understand how our suppliers can contribute to our future target setting. Informally, we encourage innovation to reduce climate impacts on products and services and look to learn and develop business relationships with suppliers who show innovation, process improvements and new technologies to help decrease costs and improve sustainability.

Impact of engagement, including measures of success

Impact of engagement and measures of success would be aligning with innovative suppliers who are able to help us achieve our emissions reduction targets, and the successful adoption and implementation of innovation to reduce climate impacts.

Comment

C12.2

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

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Implementation of emissions reduction initiatives

Description of this climate related requirement

We expect our chosen suppliers to help Enerplus in obtaining our climate goals by implementing agreed-to process improvements and/or technologies.

% suppliers by procurement spend that have to comply with this climate-related requirement

1

% suppliers by procurement spend in compliance with this climate-related requirement

3

Mechanisms for monitoring compliance with this climate-related requirement

First-party verification

Response to supplier non-compliance with this climate-related requirement

Exclude

C12.3

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

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

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

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

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

High-level engagements and executive positions within Industry Trade Associations are held by members of our executive team. Our executive team are also members of our internal ESG Management Committee and all support the development of our overall climate strategy. This alignment ensures that participants will engage in a consistent manner. At times we are not entirely aligned with Industry Trade Associations external positions, however we always make an effort to ensure our corporate climate position is heard.

C12.3b

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

Trade association

Other, please specify

American Exploration & Production Council (AXPC)

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

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

American oil and gas producers have an irreplaceable role in meeting the challenge of global climate change. The American Exploration & Production Council (AXPC), representing large independent American oil and gas producers, supports innovative, collaborative solutions that lower greenhouse gas (GHG) emissions while meeting the world's growing need for abundant, low cost, reliable energy. Successful public policy must recognize that oil and gas underpins our standard of living and American oil and gas is critical to our national security and economic prosperity.

The following principles will guide AXPC's climate advocacy efforts, including policy that:
Facilitates meaningful GHG emissions reductions:
•Requires proportional participation from all sectors of the economy
•Utilizes fair, consistent and transparent measurement methodologies across industries
•Encourages and appropriately accounts for early and/or voluntary actions
•Minimizes inconsistent, redundant and/or contradictory regulations and policies
•Attributes to energy producers only emissions arising during production operations

Balances economic, environmental and energy security needs:
•Ensures the development of critical energy infrastructure
•Makes the costs and associated climate benefits of any policy fully transparent to the American public
•Ensures that the United States shoulders an equitable burden under international agreements
•Does not disadvantage American oil and gas producers and workers against foreign competitors

Promotes innovation:
•Champions economy-wide public and private investment to develop cost-effective technologies that will materially reduce GHG emissions
•Relies upon predictable and economically efficient policy frameworks, such as the use of market-based policies and/or offsets, to deliver outcomes at the lowest cost to society
•Allows all energy sources to compete for innovation funding

AXPC Members meaningfully reduce methane emissions and advocate for natural gas opportunities to reduce greenhouse gas emissions and policies that promote innovation and technology.

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

210,000

Describe the aim of your organization's funding

Funding is a membership requirement, we have no aim for its use.

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

No, we have not evaluated

Trade association

Canadian Association of Petroleum Producers

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

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

CAPP's position, of which we are supportive:

We recognize the importance of delivering reliable, affordable, responsibly produced energy that addresses important social and environmental issues, including climate change. We believe Canadian oil and gas has a critical role to play in the integrated energy systems and is part of the global solution needed to tackle the global climate challenge. The global collective challenge is to reduce GHG emissions while also meeting growing demand for affordable and reliable energy.

CAPP will engage in constructive, solutions-focused dialogue with governments and other stakeholders and partners to develop sound policies that achieve global emissions reductions in the most efficient, cost-effective way. CAPP can contribute data-driven evidence-based analysis and operational expertise to inform the development of policy pathways that can lead to further emissions reductions. CAPP will do this in accordance with CAPP's Climate Policy Principles, which are:
•Collaborative and Solutions-Oriented
•Efficient, Effective and Predictable
•Technology and Innovation Focused
•Globally Competitive

We will work with government(s) to meet emissions reduction objectives and the ambition of the Paris Agreement, to which Canada is a signatory, as a global framework for addressing the risk of climate change.

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

55,382

Describe the aim of your organization's funding

Funding is a membership requirement, we have no aim for its use.

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

No, we have not evaluated

C12.4

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

Publication

In voluntary sustainability report

Status

Complete

Attach the document

ESGReport_2023.pdf

Page/Section reference

All pages

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

2023 ESG Report

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

TCFD_2023.pdf

Page/Section reference

All pages

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

TCFD Aligned Reporting Table

Publication

Other, please specify

ESG Data Tables

Status

Complete

Attach the document

DataTables_2023.pdf

Page/Section reference

All pages

Content elements

Emissions figures
Other metrics

Comment

ESG Data Tables

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment
Row 1	We are not a signatory/member of any collaborative framework, initiative and/or commitment related to environmental issues

C15. Biodiversity

C15.1

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

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, board-level oversight	Our RS&SR Board Committee is responsible for the oversight of our Corporate Sustainability objectives which includes our Environmental and Liability Management programs. This oversight includes quarterly updates to our environmental initiatives and reclamation and remediation activities.

C15.2

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

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity
Row 1	No, and we do not plan to do so within the next 2 years

C15.3

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

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No and we don't plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No and we don't plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

No

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water management

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No	

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Impacts on biodiversity Influence on public policy and lobbying Risks and opportunities	1

1ESGReport_2023.pdf

C16. Signoff

C-FI

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

C16.1

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

	Job title	Corresponding job category
Row 1	Manager, Corporate Sustainability	Environment/Sustainability manager

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms