

Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

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

Williams (NYSE: WMB) is committed to being the leader in providing infrastructure that safely delivers natural gas products to reliably fuel the clean energy economy. Headquartered in Tulsa, Oklahoma, Williams is an industry-leading, investment grade C-Corp with operations across the natural gas value chain including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids. With operations spanning 25 states and major positions in 14 top U.S. supply basins, Williams connects the best supplies with the growing demand for clean energy. Williams owns and operates more than 33,000 miles of pipeline infrastructure nationwide — including Transco, the largest volume pipeline in the United States — and handles approximately one third of the natural gas in the United States that is used every day for clean-power generation, heating and industrial use. Our Core Values are engrained in how we do our work, every day, on behalf of our key stakeholders, including our communities, customers, employees and investors. At Williams, we are:

Authentic: Our integrity cannot be compromised; for more than a century we've remained true to ourselves, always striving to do the right thing.

Safety Driven: Safeguarding our people and neighbors is rooted in our culture and fundamental to everything we do.

Reliable Performers: We stand behind our reputation as a dependable and trustworthy business that delivers on our promises.

Responsible Stewards: We are dedicated to strengthening our people and communities and to protecting the environment.

The boundaries of the emissions data provided in this disclosure inventory focus on our direct operations that we own and operate (consolidation approach is operational control for Scope 1 and Scope 2) and exclude company vehicles. This boundary and the exclusions are referenced in questions 6.1, 6.3, 6.4 and 6.4a.

Our CDP responses are not filed with the U.S. Securities and Exchange Commission (SEC) and accordingly are not prepared in accordance with the SEC's rules and regulations applicable to filed reports or documents. We note that the information in the CDP response may

contain or incorporate by reference statements that do not directly or exclusively relate to historical facts. To the extent the SEC were to adopt rules, regulations, or otherwise take a position that our CDP responses are subject to liability under Federal securities laws, we note that such statements are “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements relate to anticipated financial performance, management’s plans and objectives for future operations, business prospects, outcome of regulatory proceedings, market conditions and other matters. We make these forward-looking statements in reliance on the safe harbor protections provided under the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included herein that address activities, events or developments that we expect, believe or anticipate will exist or may occur in the future, are forward-looking statements.

Forward-looking statements can be identified by various forms of words such as “anticipates,” “believes,” “seeks,” “could,” “may,” “should,” “continues,” “estimates,” “expects,” “forecasts,” “intends,” “might,” “goals,” “objectives,” “targets,” “planned,” “potential,” “projects,” “scheduled,” “will,” “assumes,” “guidance,” “outlook,” “in-service date” or other similar expressions. These forward-looking statements are based on management’s beliefs and assumptions and on information currently available to management. Certain important factors that could cause actual results to differ, possibly materially, from expectations or estimates reflected in such forward-looking statements can be found in the “Risk Factors” and “Forward-Looking Statements” sections included in Williams’s Annual Report on Form 10-K filed with the SEC on February 27, 2023, and in Part II, Item 1A Risk Factors in our subsequently filed Quarterly Reports on Form 10-Q. Given the uncertainties and risk factors that could cause our actual results to differ materially from those contained in any forward-looking statement, we caution investors not to unduly rely on our forward-looking statements. We disclaim any obligations to, and do not intend to, update any particular forward-looking statement included in this questionnaire or announce publicly the result of any revisions to any of the forward-looking statements to reflect future events or developments.

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

Not providing past emissions data for Scope 2

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

Not providing past emissions data for Scope 3

C0.3

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

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

Midstream

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	WMB
Yes, an ISIN code	US9694571004

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	<p>The Board of Directors (BOD) oversees the effectiveness of the company’s environmental, social and governance (ESG) risk management and ensures management is devoting adequate attention to ESG matters, including those related to climate change.</p> <p>While climate-related topics can arise in the context of all committees and the full Board, the Board’s Governance and Sustainability Committee has primary oversight on climate change matters because the Governance and Sustainability Committee oversees the company’s ESG strategy and policies, including those related to climate change.</p> <p>The Governance and Sustainability Committee has responsibility for providing general direction on decisions regarding the sustainability of the business and tracking the ESG strategy. This includes reviewing Williams’ environmental and climate-related policy statements and recommending improvements to our Business Code of Conduct and Supplier Code of Conduct, which include sections on minimizing environmental impacts. The Governance and Sustainability Committee regularly reports to the full BOD on relevant topics for further discussion. As a recent example, in 2021, the BOD approved a rebrand and expansion of the Williams’ New Energy Ventures group focused on advancing innovative technologies, markets and business models. In 2022, Williams’ BOD contributed to and approved our ESG materiality assessment refresh which included climate-related issues.</p> <p>Additionally, in 2022, we amended our BOD charters to formalize existing practices and clarify responsibilities regarding climate change oversight. These amendments formalized climate change and Williams’ energy transition and low carbon economy strategy as topics that the Governance and Sustainability Committee must consider as part of their ESG oversight.</p>

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
<p>Scheduled – all meetings</p>	<p>Overseeing and guiding employee incentives</p> <p>Reviewing and guiding strategy</p> <p>Overseeing and guiding scenario analysis</p> <p>Overseeing the setting of corporate targets</p> <p>Monitoring progress towards corporate targets</p> <p>Reviewing and guiding the risk management process</p>	<p>The Governance and Sustainability Committee has primary responsibility of climate change matters as it oversees the company’s ESG performance. At each of the four regularly scheduled committee meetings, MSCI, Sustainalytics, DJSI, CDP, Glass Lewis, and ISS rating updates are reviewed. The Committee discusses the perceived business drivers of these scores.</p> <p>The Environmental, Health and Safety Committee also considers climate-related issues. Environmental and safety performance, compliance and targets are discussed during all quarterly meetings, as are fugitive emissions, GHG performance and other topics. This Committee also contributes to and provides recommendations for Williams’ Annual Incentive Program (AIP) metrics.</p> <p>Climate change risk is considered in many areas of our corporate strategy process. One of which is our Strategic Risk Assessment process (SRA) which identifies the top risks that could impact Williams’ strategic direction. Results from the SRA are incorporated into annual strategy BOD meeting materials. Climate change has the potential to impact several risks within our current risk taxonomy used in the SRA. Williams also uses scenario analysis in our corporate strategy process to identify and test plausible scenarios of Williams’ future. One qualitative scenario includes considerable climate-related assumptions and impacts to Williams’ strategy, informed in part by our use of third-party aligned climate-related transition scenarios.</p> <p>The BOD provides guidance and oversight into long-term strategic decisions that ultimately influence climate-related business plans and performance targets. In 2022, the BOD discussed investments and partnerships related to New Energy Ventures, including development-stage</p>

		<p>funding in hydrogen generation and other clean energy technologies and joining the midstream Quantification, Monitoring, Reporting and Verification (QMRV) program. Another example of guidance from the corporate strategy process and its climate considerations is exploring the use of solar powered facilities across various existing processing plants and pipeline systems. Use of solar to support powering facilities is a consideration for upcoming capital projects.</p> <p>Beginning in 2022, we incorporated a new target into our AIP to reduce methane emissions over a three-year average. Alongside this target, we will continue to reduce our loss of primary containment (LOPC) events, defined as the unplanned or uncontrolled release of material from primary containment of a production, storage, distribution, pipeline or related facility used for storage, separation, processing or transfer of material such as a tank, vessel, pipe, pump, compressor or processing equipment, including methane. Achieving these influences short-term annual incentives for all the employees eligible for our AIP. We weighted both the LOPC goal and methane reduction goal at 5% of our 2022 AIP, including executives, totaling a 10% weighting for climate-related metrics.</p>
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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	<p>Several members of our BOD have competence on climate-related issues. Our process for identifying climate-related experience is a combination of reviewing Director and Officer Questionnaires, that each director is required to complete annually, and a director self-identification based on a review of the skills matrix included in our proxy statement. Note that we could reasonably take the position that, given our directors are regularly presented with climate-related matters as part of our natural gas focused business and operations, including significant environmental regulatory matters, all 12 of our directors have such experience. However, we take a more conservative approach as follows. Our BOD skills matrix includes a skill for Energy</p>

		<p>Transition, defined as “experience in sustainability or transitioning to alternative non-hydrocarbon energy sources,” and we have identified eight directors with this skill in 2022. Such skills matrix also includes a skill for Environmental, defined as “provides experience in regulatory schemes and best practices to enhance our environmental stewardship,” and we have identified eight directors with this skill in 2022. Note that there is overlap among directors regarding the two skills. Examples of climate-relevant experience indicating the existence of such skills include, but are not limited to, experience in non-hydrocarbon-based energy sources like wind and nuclear energy (either in a regulatory or business capacity), implementation of greenhouse gas emission reduction targets and strategies (including for methane), oversight of environmental reclamation projects including land restoration and experience holding an executive position related to sustainability.</p>
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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

Providing climate-related employee incentives
 Integrating climate-related issues into the strategy
 Assessing climate-related risks and opportunities
 Managing climate-related risks and opportunities

Reporting line

Reports to the board directly

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

More frequently than quarterly

Please explain

Williams’ Chief Executive Officer (CEO) has ultimate responsibility for the oversight and management of all company risks and therefore is the highest management-level position with responsibility for climate-related risks and opportunities. Additionally, the CEO also manages investment in our clean technology ventures like Context Labs, approves and contributes to the direction of AIP metrics and targets, provides direction and input on the annual strategy session with the BOD and leads global execution of company strategy. The CEO reports directly to the BOD.

Additionally, the leader of our New Energy Ventures program reports directly to the CEO. This means that the CEO has direct responsibility for monitoring the evaluation of alternative energy sources through this program, including certified, low-emissions NextGen Gas, hydrogen and carbon capture, utilization and storage (CCUS).

Position or committee

Other, please specify

Environmental, Social and Governance Director

Climate-related responsibilities of this position

Providing climate-related employee incentives

Managing public policy engagement that may impact the climate

Managing value chain engagement on climate-related issues

Assessing climate-related risks and opportunities

Reporting line

Finance - CFO reporting line

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

More frequently than quarterly

Please explain

To further integrate overall environmental, social and governance (ESG) strategy including climate change into the day-to-day activities across the organization, Williams has an ESG Director. Because these responsibilities tie directly to our investor relations, the ESG Director reports to Williams' Vice President of Investor Relations & ESG. Given the persistent importance of ESG to our long-term business viability, the corporate ESG team shifted to the umbrella of our Chief Financial Officer (CFO) in 2022.

The ESG Director is responsible for engaging with shareholders and other stakeholders to understand ESG expectations and communicate our performance, as well as raising the visibility of Williams' ESG capabilities. The ESG Director oversees a team of full-time, dedicated Corporate ESG employees, and we continue to grow the capacity of this team. The ESG Director collaborates with several groups within the organization, including Investor Relations, Communications & Corporate Social Responsibility, Government Affairs & Public Outreach, Corporate Strategic Development and the Corporate Secretary, to promote effective delivery of ESG-related activities and communicate results to investors and key stakeholders. Climate issues are also monitored by the Environmental Specialists, our legal team, the Air Compliance and Emissions Reduction group and, increasingly, the Operations groups regarding our methane Annual Incentive Program.

Position or committee

Chief Operating Officer (COO)

Climate-related responsibilities of this position

- Setting climate-related corporate targets
- Monitoring progress against climate-related corporate targets
- Assessing climate-related risks and opportunities
- Managing climate-related risks and opportunities

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

Williams' Chief Operating Officer (COO) sits on the Executive Officer Team (EOT) and reports directly to the Chief Executive Officer (CEO). As part of this role, the COO is responsible for the operational aspect of climate change, including oversight of implementing emissions reduction initiatives. The COO has responsibility for climate-related issues because the majority of Williams' climate risk is associated with its direct operations. To reduce carbon intensity, and by extension, risk, there are strategic initiatives underway to reduce fugitive methane emissions and modernize our operations through enhanced programs and equipment, mitigate greenhouse gas emissions by utilizing solar energy at compression stations and testing hydrogen fuel blends and enhance emissions data collection by investing in new technologies to identify emissions sources. Additionally, the COO collaborates with the New Energy Ventures program to identify emerging technologies to support our operational emissions reduction efforts.

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	

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

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of a climate-related target

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

There are two emissions reduction targets that drive internal performance for the Corporate Executive Team, and these include:

Williams maintains a loss of primary containment (LOPC) target that includes the unplanned or uncontrolled release of methane. Loss of primary containment is defined by API 754 as an unplanned or uncontrolled release of material from primary containment of a production, storage, distribution, pipeline or related facility used for storage, separation, processing or transfer of material such as a tank, vessel, pipe, pump, compressor or processing equipment. We weighted the LOPC goal at 5% of our 2022 Annual Incentive Program, including the corporate executive team. The LOPC goal will be continued in 2023 and again weighted at 5%. In addition to the LOPC goal, Williams also established a new methane reduction goal in 2022 to reduce 2022 methane emissions by 5% compared to the 3-year (2019-2021) baseline average. The methane reduction goal also has a 5% weighting for our 2022 AIP. The methane reduction goal will also be continued in 2023 and again weighted at 5%. Achieving these targets influences short-term, annual incentives for all the employees eligible for our Annual Incentive Program.

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

Our absolute (Abs 1) and net zero (NZ 1) targets apply to all Scope 1 and 2 (location-based) carbon emissions including methane. Methane makes up approximately 16% of our total Scope 1 and 2 emissions. As we seek to maximize natural gas resources to meet growing demand, we are working to reduce greenhouse gas emissions from our operations. To reach the 2030 target, Williams is pursuing common sense methane emissions reduction opportunities through leak detection and repair, implementing work practice improvements, evaluating equipment upgrades on a site-specific basis and considering technologies such as CCUS, solar and battery storage that may accelerate our reductions. Since 2018, methane emissions from our natural gas processing plants and transmission compressor stations have increased by 4%. Over the same period, the natural gas throughput at these facilities increased by 24%. This managed increase is due to a combination of having fewer and smaller pipeline blowdowns, installing emissions control technologies and making more frequent upgrades to our system. In addition to pursuing reductions in absolute GHG emissions, Williams continues to decrease our emissions intensity, which measures GHG emissions per unit of natural gas throughput. Even though we continue to expand our footprint, targeted

improvements in practices and technology have enabled us to decrease our emissions intensity by 16.5% since 2018. By segment, Williams' 2022 methane emissions intensity performance was 0.046% for gathering and boosting, 0.025% for processing and 0.026% for transmission and storage, all of which outperform the 2025 targets set by Our Nation's Energy Future Coalition, Inc. (ONE Future): 0.080%, 0.111% and 0.301%, respectively. This achievement highlights Williams' role as a responsible energy operator that is best equipped to deliver clean, affordable and reliable energy.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of a climate-related target

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Williams employees, except for ~100 employees who instead participate in our "Trading Incentive Program," are eligible for Williams' Annual Incentive Program (AIP), as a part of our overall pay strategy and total rewards package. There are two emissions reduction targets that drive internal performance, and these include:

Williams established a loss of primary containment (LOPC) event reduction target that measures instances of unplanned or uncontrolled release of any material, including methane, in any amount from primary containment within the process (e.g., tank, vessel, piping) or equipment attached to the process, helping us learn and avoid future instances and meet our ESG goal to reduce greenhouse gas emissions. We weighted the LOPC goal at 5% of our 2022 Annual Incentive Program. The LOPC goal will be continued in 2023 and again weighted at 5%.

Williams also established a new methane emissions reduction goal in 2022 to reduce 2022 methane emissions (Scope 1 and Scope 2) of assets under Williams' operation control by 5% compared to the 3-year (2019-2021) baseline average. The methane emissions reduction goal also had a 5% weighting for our 2022 AIP. The methane emissions reduction goal will be continued in 2023 and again weighted at 5%.

Achieving these targets influences short-term, annual incentives for all employees eligible for our Annual Incentive Program.

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

Our absolute (Abs 1) and net zero (NZ 1) targets apply to all Scope 1 and 2 (location-based) carbon emissions, including methane. Methane makes up approximately 16% of our total Scope 1 and 2 emissions. As we seek to maximize natural gas resources to meet growing demand, we are working to reduce greenhouse gas emissions from our operations. To reach the 2030 target, Williams is pursuing common sense methane emissions reduction opportunities through leak detection and repair, implementing work practice improvements, evaluating equipment upgrades on a site-specific basis and considering technologies such as CCUS, solar and battery storage that may accelerate our reductions. Our two emissions-related Annual Incentive Program metrics contribute to this strategy by reinforcing processing that drive high data quality, driving everyday behaviors of operational diligence through continued improvement in equipment design and installation and executing cost-effective emissions reduction projects. Since 2018, methane emissions from our natural gas processing plants and transmission compressor stations have increased by 4%. Over the same period, the natural gas throughput at these facilities increased by 24%. This managed increase is due to a combination of having fewer and smaller pipeline blowdowns, installing emissions control technologies and making more frequent upgrades to our system. In addition to pursuing reductions in absolute GHG emissions, Williams continues to decrease our emissions intensity, which measures GHG emissions per unit of natural gas throughput. Even though we continue to expand our footprint, targeted improvements in practices and technology have enabled us to decrease our emissions intensity by 16.5% since 2018. By segment, Williams’ 2022 methane emissions intensity performance was 0.046% for gathering and boosting, 0.025% for processing and 0.026% for transmission and storage, all of which outperform the 2025 targets set by Our Nation’s Energy Future Coalition, Inc. (ONE Future): 0.080%, 0.111% and 0.301%, respectively. This achievement highlights Williams' role as a responsible energy operator that is best equipped to deliver clean, affordable and reliable energy.

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	3	

Medium-term	3	7	
Long-term	7	100	

C2.1b

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

We identify risks that could impact our strategy and its execution through an annual Strategic Risk Assessment that aligns with our long-term corporate strategy process. This systematic process is facilitated by our corporate strategy team and incorporates senior management and risk process owners throughout the organization to rate risks. As a part of this process, an annual survey is conducted to assess the impact and likelihood of risks that could influence Williams' strategic objectives. The survey includes a qualitative and quantitative assessment and evaluates all risks, many of which include climate topics such as legislative and regulatory, reputational and other strategic and operational risks.

Risks are rated on impact and likelihood of the residual risk. Our Survey participants are asked to first consider the potential impact of risks and rate them on impact scales which define five levels of potential impact from incidental to extreme. Depending on the risk, the impact could be financial, operational or safety, human capital, reputational or a combination.

For example, Williams defines an incidental financial impact as an annual financial loss of up to \$10 million dollars and an extreme/substantive financial impact as an annual financial loss of \$300 million or more. An incidental reputational impact would be that Williams would receive local media attention that could be remedied quickly, and an extreme/substantive reputational impact would result in international or long-term negative media coverage. If there is potential for a combination of impacts (financial, reputational, etc.), participants are asked to select the highest impact score.

After determining the impact, participants are then asked to score the likelihood of the risk at the selected impact level. Participants can choose from five levels of likelihood ratings ranging from rare (up to 15% chance) to almost certain (greater than 85% chance). The impact and likelihood scores are then added together to get the total risk score. Lastly, the survey assesses the effectiveness of existing risk controls.

The combined risk impact and likelihood scores provide a quantifiable indicator for selecting top risks. Risks with the highest total risk score are considered potentially substantive and included in Williams top risk analysis. Williams has been able to identify a natural break in risk scores clearly isolating risks that have the highest potential to impact our strategy (i.e., Top Risks), therefore conceivably having the potential to produce substantive financial and/or strategic risk. An Executive Officer Team (EOT) member is assigned accountability for each Top Risk. Top Risks are also shared with the BOD as a part of the annual strategy process.

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
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Climate risk can manifest itself in a variety of ways and it influences Williams' view of our strategic, operational and compliance and reporting risks. Williams executive team conducts an annual strategy session to discuss our strategy with the BOD. During the strategy session our long-range financial and projected financial results (10-year outlook) are reviewed and discussed along with strategic risks and opportunities, which may include market supply/demand implications, upstream and downstream customer impacts and other factors that could impact long-term strategic decisions. Such risks and opportunities may include climate-related risks such as physical and transition risks that have been identified and assessed as being relevant to our strategy.

To identify the top risks to our strategy, our strategy team conducts an annual survey to assess risks that could impact Williams' strategic objectives. Survey participants include all VPs and above and other key risk owners. Risks are grouped into 30 risk categories that are consolidated into four classifications: Strategic, Operational, Compliance and Reporting. In the survey, Williams uses risk measurement scales to quantify scoring of the likelihood and impact of risks. The top risks identified through the process are those that have the highest potential to produce a substantive impact on executing against our corporate strategy.

In regard to climate related risk, we are particularly focused on impacts to and from our direct operations, which may occur in the short- and medium-term. Acute physical risks are included as part of our evaluation of catastrophic loss and business interruptions during our annual Strategic Risk Assessment. In 2021, four (Shareholder/Stakeholder

expectations, Financial Markets/Cost of Capital, Reputation and Financial Reporting and Disclosure risks) of our 30 risks definitions in our risk taxonomy were amended to clarify inclusion of ESG risks, including environmental and/or climate risks. We realize that shifts in public, customer or regulatory opinions towards products produced with lower emissions affect market potential and access to capital and that increased support for lower emissions could result in changes to regulations and reporting requirements, all of which can present climate related risk to Williams.

Beyond identifying and managing climate related risks in our existing operations, in efforts to respond to climate-related risks and opportunities and to meet emissions reduction commitments, we developed a strategic framework to guide the execution of clean energy opportunities. In 2021, Williams created our New Energy Ventures (NEV) team to identify and pursue opportunities that would deliver emissions reduction for Williams or our customers and provide future growth prospects. Before an NEV opportunity is pursued we consider if our investment will meet the following guiding principles: (i) achieve carbon reductions, (ii) create economic value, (iii) target opportunities where our capabilities provide a competitive advantage and (iv) result in an outcome that is scalable.

We also evaluate transition risks, including reputational risk. We face reputational risks that could result in a loss of ability to compete and ultimately present negative financial impacts due to perceptions that Williams or the industry does not effectively manage its business, deal fairly with stakeholders or accept responsibility to the community.

(Situation) We face reputational risks across many of our geographies, including those in which the permitting environment for expansion projects is increasingly difficult due to local, public opposition related to climate change and the negative perception of natural gas, including doubt about the role it plays in a clean energy future. Our proposed Southeast Energy Connector in Alabama, which expands our Transco pipeline extending from Texas to New York City, is one such recent example.

(Task) One way we address these risks is to partner with local, respected institutions to analyze project benefits to local communities so that those benefits can be more effectively communicated.

(Action) In 2022, Williams commissioned an economic impact assessment for the Southeast Energy Connector project from the University of Alabama. The study determined that the construction phase alone will generate \$97.5 million in gross business activity. The project is expected to generate nearly 300 total jobs and \$2.3 million in state and local tax revenues. At the county level, the Southeast Energy Connector is projected to generate \$12.4 million in GDP contributions for Chilton County and \$22.7 million for Coosa County.

Beyond economic impacts, Williams also assessed environmental impact of the project. The project will serve the Ernest C. Gaston Electric Generating Plant, a 2,015-megawatt capacity power station in Shelby County, Alabama. Gaston Unit 5 is owned by Alabama

Power Company, who has stated its intent to comply with existing environmental compliance requirements by transitioning Gaston Unit 5 from using coal for power generation to using only natural gas. Switching Gaston Unit 5 from coal for power generation to natural gas would have significant environmental benefits. Gas-fired facilities emit CO₂ at a rate of roughly one-half to one-third that of coal. As such, the emissions for the Project and the downstream coal to natural gas transition would result in a significant net negative GHG emissions impact. Ultimately, utilizing more natural gas in electric generation over coal, via projects like the Southeast Energy Connector Project, would reduce GHG emissions and would provide an immediate benefit to the environment.

(Result) The results of the University of Alabama study helped Williams better inform local stakeholders with researched facts about project benefits, including its design to have minimal environmental impact during construction, while yielding local economic benefits in the project area. Therefore, this study mitigated reputational risk and accelerated Alabama's transition away from coal-fired power generation, which will also benefit communities by reducing air pollution and greenhouse gas emissions.

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	<p>We consider the risks that existing climate change laws and regulations can have on our business as part of the legislative and regulatory risk category that is included within our annual Strategic Risk Assessment. This risk category is always included in our Strategic Risk Assessment process, as our operational practices must abide by all current regulation and changes to regulations could impact our strategic decisions.</p> <p>An example of anticipated changing regulation is found in the U.S. Environmental Protection Agency's (EPA) federal emission standards targeting reductions in methane and volatile organic compound (VOC) emissions for new, reconstructed, or modified sources for crude oil and natural gas facilities. These proposed regulations also set forth emission guidelines for existing sources and enhanced leak detection requirements for new and existing sources. Much of the proposed rule builds upon the U.S. EPA's existing methane and VOC emission limits for oil and natural gas production and processing segments. This rule would significantly expand regulation of methane and VOC emissions to more existing sources in the natural gas transmission and storage sectors of the industry. Williams actively participated in the rulemaking process by submitting public comments to the U.S. EPA in 1Q 2023.</p>

		<p>We recognize that these regulations, once finalized, may expose us to significant costs, liabilities and expenditures above our expectations if we do not factor them into our current operational risk management strategy.</p>
Emerging regulation	Relevant, always included	<p>We consider the risks that new climate change laws or greenhouse gas regulations could have on our business as part of the legislative and regulatory strategic risk category that is included within our annual Strategic Risk Assessment process. Emerging regulations are always considered in our operational climate risk assessments because the rules may be proposed but not yet adopted and finalized. One example of a risk of this type included in our climate-related risk assessment is how climate change regulations and the costs associated with the regulation of greenhouse gas emissions have the potential to affect existing or new projects.</p> <p>Regulatory actions by the U.S. Environmental Protection Agency or the passage of new climate change laws or regulations such as carbon pricing or taxing could result in increased costs to operate and maintain our facilities, install new emission controls on our facilities or administer and manage our greenhouse gas compliance program. We believe it is possible that future governmental legislation and/or regulation may require us either to limit greenhouse gas emissions associated with our operations or to pay for such emissions. Several states that Williams operates in (Colorado, Pennsylvania, Virginia, New York, Maryland and Ohio) already have updated regulations aimed to reduce fugitive methane emissions at natural gas processing and compression facilities. We evaluate the potential for increased costs associated with installing new emission controls or changing how we manage our greenhouse gas reporting.</p>
Technology	Relevant, always included	<p>As a part of our annual Strategic Risk Assessment, we consider competitor risks which would include the potential for existing or new competitors to utilize new technology or innovation that could impact our competitive position. This risk category is always included in our Strategic Risk Assessment process, as impacts of potential competition are considered when making strategic decisions. As well, business decisions often include technological considerations to evaluate improvements in technology that would support further reduction of emissions from our direct operations. We evaluate the likelihood of technology disrupting our business as part of our qualitative scenario analysis in our strategy process. One such scenario is “Green Transformation,” which evaluates the associated impacts of fossil fuels being phased out more quickly than in our other scenarios due to technology advancements and increasing cost-competitiveness of clean energy technologies.</p>

		<p>Example: The Green Transformation scenario assumes rapid technological advancements lower the cost of renewables and expedites renewable energy adoption, both of which are driven and supported by new policies and government incentives or subsidies, such as higher state-level renewable targets and/or federal tax credits.</p> <p>To further identify areas of opportunity associated with climate change, Williams established our Corporate Venture Capital (CVC) program as an outgrowth of our New Energy Ventures, a dedicated team to explore innovative technologies, markets and business models. In 2022, we allocated approximately \$50 million toward investment in startups, new technologies and new initiatives through our CVC program. These initiatives include no/low carbon solutions such as solar, hydrogen, carbon capture and storage, NextGen Gas (certified, low-emissions gas), high-tech emissions testing and monitoring and other climate related programs.</p>
Legal	Relevant, always included	<p>Williams regularly undertakes legal monitoring and oversight of climate-related issues. For instance, our Legal team monitors proposed and final rules and amendments to environmental laws and administrative regulations. Examples include the SEC's 2022 proposed rules on climate disclosures (for which we submitted a comment letter), U.S. EPA methane-related proposals, proposed FERC and other reporting requirements and litigation relating to environmental and climate change matters.</p> <p>Business interruptions from potential lawsuits are considered as a component of several different strategic and/or operational risks, which are always evaluated as part of our annual Strategic Risk Assessment process. For example, our business could be affected by the potential for lawsuits against greenhouse gas emitters, based on links drawn between greenhouse gas emissions and climate change. Lawsuits stemmed from opposition to fossil fuels can disrupt or delay the operation or expansion of our assets.</p> <p>Example: While we have not had any material legal implications in the past, we have experienced opposition to some of our expansion projects in the past including the Northeast Supply Enhancement (NESE) pipeline. Other peers in the oil and gas industry have faced lawsuits regarding climate change issues such as emissions reduction and discrepancies in reporting.</p>
Market	Relevant, always included	<p>We evaluate business risks associated with changing market conditions and customers shifting to renewable sources of energy in several of our strategic risk groupings (e.g., Customer expectation risk and Macro Economic conditions, and Legislative and regulatory) as a part of our Strategic Risk Assessment process. Adverse impacts on the oil and gas</p>

		<p>industry related to the worldwide social and political environment, including uncertainty or instability resulting from climate change, may also adversely affect demand for our services. We consider such risks in developing our qualitative scenario analysis process.</p> <p>Example: Our qualitative “The Green Transformation” scenario evaluates the associated impacts of fossil fuels being phased out rapidly due to market changes and political actions. This scenario assumes the global energy crunch accelerates the energy transition and U.S. lower 48 gas demand ultimately declines due to increasing renewables penetration, energy efficiency measures and consumer preferences for clean energy.</p>
Reputation	Relevant, always included	<p>Reputation risk is a category of risk that we include as part of our annual Strategic Risk Assessment. Reputational risks are considered a loss of customers, key employees, community support or a loss of ability to compete due to perceptions that Williams or the industry does not effectively manage its business, deal fairly with stakeholders, or accept responsibility to the community. As part of this process, we assess the reputational risks to our business associated with climate change. Williams prides itself on its strong reputation and always strives to maintain its excellent reputation with all stakeholders, including shareholders, customers and communities where we operate. Assumptions on society perceptions of natural gas, and correspondingly Williams’ reputation and brand, are included in our qualitative scenario analysis process.</p> <p>Example: Williams’ scenarios consider the social impacts of climate change and overall sentiment of communities, customers and other stakeholders towards natural gas. For example, the Green Transformation Scenario’s key social assumptions include an aggressive move toward carbon neutrality that drives consumer choice away from non-renewable fuel sources. If we do not adapt to some stakeholder expectations and standards, regardless of whether there is a legal requirement to do so, we may suffer from reputational damage and the business, financial condition and/or our stock price could be materially and adversely affected. Investors’ increased focus on climate change and sustainability matters may hinder access to capital, as investors may decide to reallocate capital or to not commit capital because of their assessment of a company’s reputation or social practices.</p>
Acute physical	Relevant, always included	<p>Acute physical risks, including those associated with climate change, are included as part of our evaluation of catastrophic loss and business interruption during our annual Strategic Risk Assessment. Physical risk considerations are also included in project-specific and geography-specific risk assessments. Increased frequency and severity of weather</p>

		<p>events such as hurricanes require more system backup, which can add costs and contribute to increased system stresses, including service interruptions. We calculate sufficient redundancy in our compression systems based on historic weather patterns and maintenance activities. To the extent the frequency of extreme weather events increases, this could increase our cost of providing service. We may not be able to pass on the higher costs to our customers or recover all costs related to mitigating these acute physical risks.</p> <p>Example: Winter Storm Elliott in December 2022 had devastating effects across more than two-thirds of the U.S. and taxed our nation’s energy supply, including natural gas transported by our Transco Pipeline. Transco pipeline pressures at several delivery points in the Southeast fell below normal levels due to utilities taking increased quantities of gas to meet demand. While Transco took steps to resolve the imbalances and met all contractual obligations, the rapid increase in demand coupled with the reduction of supply due to production freeze offs resulted in lower pressures in major demand markets impacting customers that relied on historical pressure norms in their system design.</p> <p>Our offshore operations are the most vulnerable to severe weather. In 2022, Gulf East production was shut-in due to Hurricane Ian. We have worked to mitigate the impacts of acute physical risk through utilizing imbalance tools, physical barriers, strengthening our assets and additional insurance coverage. Over the past decade, Williams has seen very limited physical damage to our offshore facilities. Being proactive to implement design changes and facility hardening, along with compliance related work with new offshore regulations, has been at the core of our mitigation strategy.</p>
Chronic physical	Relevant, always included	<p>Chronic physical risk, including those associated with climate change, are included as part of our evaluation of asset integrity risks and business interruption/catastrophic loss during our annual Strategic Risk Assessment. As a risk, asset integrity considers the design, installation and operation of our assets to operate in a safe and reliable manner, this would include being able to withstand impacts of climate change. Physical risk considerations are also included in project-specific and geography-specific risk assessments. For example, many climate models indicate that climate change is likely to result in rising sea levels and more frequent rain events, which may lead to higher insurance costs or a decrease in available coverage for our assets in areas subject to severe weather. These climate-related changes could damage our physical assets. In particular, Williams’ assets located in low-lying areas near coasts and riverbanks and facilities situated in hurricane-prone and rain-susceptible regions. Over the past decade,</p>

		<p>Williams has seen very limited physical damage to these facilities as we are proactive to implement design changes and facility hardening. These actions, in addition to compliance related work, have been at the core of our mitigation strategy.</p> <p>Williams evaluates and manages the integrity of our assets through a variety of asset integrity programs. Similarly, business interruption as a risk considers chronic physical factors that could cause the unavailability of resources (materials, systems, people) that expose the company to loss or damage to property and third party liability and threatens our ability to sustain operations, provide products and services, maintain revenues, or recover operating costs</p> <p>Example: We use Light Detection and Ranging equipment to actively monitor land movements stemmed from increased rainfall near our compressor stations, especially in risk-prone regions such as the Appalachia.</p>
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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

Reputation

Increased stakeholder concern or negative stakeholder feedback

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Investor advocacy groups, investment funds and other influential investors are increasingly focused on environmental, social and governance practices. As part of our corporate strategy, when appropriate we strive to adapt to investor and stakeholder

expectations to prevent reputational damage caused by stakeholders' negative perspectives of hydrocarbons, including natural gas. However, we believe natural gas is an integral part of the low-carbon future, particularly when it comes to displacing higher-emission fuels such as coal and heating oil. Our shareholders may request us to implement additional sustainability procedures on existing assets or expand investments in other clean energy technologies. Investors' increased focus and activism related to climate change matters could hinder access to capital, as investors may decide to reallocate capital or to not commit capital as a result of their assessment of Williams' climate practices.

We have experienced, and we anticipate that we will continue to face, opposition to the operation and expansion of our facilities from certain governmental officials, environmental groups, landowners, tribal groups, local groups and other advocates such as what we have encountered with our Northeast Supply Enhancement (NESE) project. NESE was a proposed pipeline project that would help the state of New York transition from higher carbon heating oils to cleaner natural gas. In some instances, we encounter opposition from stakeholders that disfavor hydrocarbon-based energy supplies regardless of practical implementation, emission reductions, societal benefits or economic considerations.

Opposition to the operation and expansion of Williams pipelines and facilities can take many forms, including the delay or denial of required governmental permits, organized protests, attempts to block or sabotage our operations, intervention in regulatory or administrative proceedings involving our assets, or lawsuits or other actions designed to prevent, disrupt or delay the operation or expansion of our assets and business. This opposition could negatively influence stakeholders view of Williams, harming our reputation. As well, the opposition to hydrocarbon infrastructure increases installation costs and can delay in-service dates. Cost increases and delays that prevent the expansion of our business can interrupt the revenue generated by our operations or could adversely affect our financial condition and results of operations.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

172,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial impact figure represents a historical cost that Williams incurred after deciding to withdraw investment from one of our projects, Constitution Pipeline. For several years, the pipeline suffered delays in obtaining regulatory approvals and received concerns from landowners and environmental groups about potential environmental impacts. In fourth quarter 2019, Williams wrote-off the Constitution Pipeline for approximately \$172 million, including \$145 million for impairment and \$27 million for loss on deconsolidation. This historical cost represents an actual impact figure of the effect stakeholder concerns could have on our business therefore we are using it to estimate future potential impacts.

Cost of response to risk

20,000

Description of response and explanation of cost calculation

Helping stakeholders understand the environmental and social benefits of natural gas is essential for progressing the transition to clean energy and reducing reputational risks to our business. Costs of responding to this risk are from maintaining early and frequent engagement with our stakeholders using resources such as polling and research, townhalls and community meetings, media monitoring and educational videos. Our stakeholder engagement process is integrated into the opening stages of every new project. In 2022, the estimated total budget for these efforts was \$20,000, broken down between open house activities and environmental justice meetings.

In 2022, open house activities had an estimated budget of \$10,000. Williams deployed a stakeholder database to identify relevant stakeholders in 2022 for our Southeast Energy Connector project, sending letters to stakeholders to inform them about the project and community open houses. We held two open houses (one in-person, one virtual) related to this project. Climate change may have been a topic in any of these meetings, and our Climate Commitment was covered in the virtual meetings. Spending breaks down roughly to:

\$7,000: in-person meeting (travel, materials, etc.)

\$500: virtual meeting

\$2,500: advertising

We held nine Environmental Justice meetings in 2022, at which climate change/ our Climate Commitment was discussed. Estimated cost of these meetings is \$10,000.

(S) Williams is developing the Regional Energy Access expansion to increase Northeast consumer access to natural gas. This expansion of Williams' existing infrastructure will provide greater access by the 2024 winter heating season, with approximately half of the project in service for the 2023 winter heating season.

(T) We engage with stakeholders to understand different perspectives and sustain

positive relationships with communities in which we operate.

(A) During the project, we monitored stakeholder metrics and engaged with an NGO to review stakeholder perceptions. This approach resulted in several opportunities to share project information.

(R) In 2022, we held a series of events with first responder organizations to share project information relevant to facilities in their coverage area. We also contacted several community organizations to increase engagement. We used bilingual project materials and held a series of meetings with local, county and state officials in the spring and fall.

Comment

C2.4

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

Yes

C2.4a

(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?

Downstream

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Returns on investment in low-emission technology

Company-specific description

Williams has a variety of low-emissions solutions and technologies we plan to implement in our own operations first to help achieve our emissions reductions targets and then may be used to generate revenues in the future. Examples include but are not limited to NextGen Gas, CCUS and solar and battery storage program.

Solar energy (short-term): Specifically, Williams' solar and battery storage program provides an opportunity to offset electricity usage at some existing facilities with renewable energy by building photovoltaic solar and battery systems behind the meter. In 2022, after assessing the feasibility of battery applications across our operations, Williams advanced two solar and battery storage projects at Transco compressor stations to the permitting phase. These projects received BOD sanctioning in April 2023 and are targeted to be commercially operational by the summer of 2024. We expect the two projects to have a combined solar power production of 27,500 megawatt-hours annually, equivalent to emissions savings of 13,000 tons CO₂e per year if renewable energy credits are claimed and retired. This is equivalent to removing 2,893 gasoline-powered passenger vehicles from the road. In similar fashion, other opportunities exist across our land portfolio for us to utilize our footprint to build utility-scale solar and battery storage facilities to supply and meet third-party energy demand. Across our land portfolio, our solar team is developing 21 projects totaling approximately 360 megawatts of solar capacity and 300 megawatts of battery capacity. These facilities, targeted to be in service in 2024 and subsequent years, will generate renewable energy credits that can be sold to the market or retired to offset our Scope 2 emissions.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

67,000,000

Potential financial impact figure – maximum (currency)

101,000,000

Explanation of financial impact figure

As part of Williams' path to achieving our absolute emissions reduction goal of 56% by 2030, we have progressed two solar projects into advanced development stages which are targeting a 2024 in-service date. In addition, 19 projects are stepping through our development process. We have identified solar investment opportunities up to \$675 million dollars with attractive returns. Williams expects to see a total 10%-15% realizable project return (5%-9% base project return, <1%-3% from renewable energy credits and 2%-3% in tax credit). 10%-15% of the total possible amount of \$675 million invested is how we arrived at the \$67-101 million potential financial impact. This assumes standard project return rates.

Cost to realize opportunity

675,000,000

Strategy to realize opportunity and explanation of cost calculation

In 2021, we rebranded and expanded the Williams' New Energy Ventures group focused on advancing innovative technologies, markets and business models. New Energy Ventures collaborates with talent across Williams, along with external partners and customers, to evaluate and implement projects that deliver environmental and financial gains.

We identified up to \$675 million of solar investment opportunities between 2024-2032 as part of Williams' New Energy Ventures capital allocation.

- \$60 million, including total anticipated spend to procure, build and install solar facilities, for two projects in advanced development stages
- \$180 million for internal projects supporting Williams' operations
- \$435 million for third party opportunities - enhancing grid stability and reliability for third party utility companies

Through 2022, Williams spent a total of 8.2 million to advance development of the identified solar program projects.

(Situation) Williams has set short-term and long-term emissions reductions targets for 2030 and 2050, respectively.

(Task) In order to meet these goals, Williams will leverage multiple solutions and technologies to reduce emissions. One of the key projects in this portfolio is our solar initiative.

(Action) In 2022, Williams continued advancing solar projects in development and will continue further development of these and other projects. There are two to three internal projects slated for in-service every year from 2024 to 2027, assuming expectations stay consistent from a capital, supply chain and regulatory standpoint. These projects are currently under development in Ohio, Pennsylvania, New Jersey, Colorado and Florida and the solar facilities will be located either on land currently owned or near our operating facilities.

(Result) Investments in intermittent solar power are made viable by the benefits of combined cycle back up on the grid and tax credits. The capacity of these facilities will range from 1 megawatt to 20 megawatts depending on the energy needs of the Williams facility.

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

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

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

We have a different feedback mechanism in place

Description of feedback mechanism

Williams regularly engages with our investors' ESG groups and analysts. Through weekly investor calls and meetings, Annual Meeting of Stockholders, frequent investor updates, in-person and virtual investor conferences and conference calls, shareholders have opportunities to ask questions and provide feedback. These efforts are led by our Corporate ESG and Investor Relations business functions. In 2022, the Investor Relations team facilitated 16 ESG-focused investor conference calls, 8 of which included a member of the executive management team. In addition to our New Energy Ventures program and the energy transition, these engagements cover other sustainability topics like biodiversity and land use, corporate governance, diversity and inclusion and operational greenhouse gas emissions.

Frequency of feedback collection

More frequently than annually

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

Attachment shows New Energy Ventures 2022 Brochure. Additional details can be found at: <https://www.williams.com/sustainability/new-energy-ventures/> AND <https://www.williams.com/sustainability/climate-commitment/>

 New-Energy-Ventures-2021_final-1.pdf

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
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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 Bespoke transition scenario	Company-wide	1.6°C – 2°C	<p>As a part of our annual corporate strategy development process, we generated and evaluated four custom qualitative and quantitative scenarios, considering low and high natural gas demand and limited or significant political and social intervention activities for each. Scenarios are developed to evaluate business impacts, some of which could be related to climate change, on our strategy and financial results. Key internal parameters, assumptions and analytical choices are developed around the macroeconomic environment, commodity prices, natural gas production, natural gas demand and momentum and progress of the energy transition for each scenario. Factors impacting the energy transition change across the market regularly, and, therefore, we allow flexibility in our scenarios to make assumptions based on new actions, policies, technologies, investments, consumer preferences, legislation and state emission targets.</p> <p>We leveraged our third-party consultants and available third-party forecasts, such as Wood Mackenzie and IEA, to compare our scenarios. We reviewed the assumptions of each and adjusted based on our own projections. Our scenarios are not developed to derive a temperature increase; however, natural gas demand in our scenarios aligns with vendor forecasts which have estimated temperature impacts based on factored methodology. For example, one of our 2022 scenarios, “Green Transformation,” shows U.S. legislative actions prohibiting new infrastructure development as the country pursues a rapid decarbonization plan, likely aligning with a 2.0-2.5-degree temperature rise by 2100.</p>

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

What strategic opportunities can be identified through climate related scenario analysis to help support Williams Strategic Vision and help Williams reach its Climate Commitment?

What impact would climate scenarios have on Williams' existing business?

What is the impact that coal-to-gas switching could have worldwide?

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

During the annual strategy session, scenario analysis, which incorporates climate-related transition scenarios, is provided to our BOD and Executive Officer Team to assist them in evaluating the strategic impact to Williams existing business as well as to help identify potential opportunities that could arise. In an effort to test our strategy and identify strategic opportunities, Williams develops four customized scenarios. The "Green Transformation" scenario is the most aggressive custom decarbonization scenario and includes changes in regulation as well as public opinion. This scenario shows U.S. legislative actions prohibiting new natural gas infrastructure development and the country pursuing a rapid decarbonization plan, but not quite as fast as the IEA 2 Degree Celsius Scenario (2DS).

As a result of Williams' strategy and scenario discussions, Williams created our Corporate Venture Capital (CVC) program as an outgrowth of our New Energy Ventures. In 2022, we allocated approximately \$50 million toward investment in startups, new technologies and new initiatives through our CVC program. These initiatives include no/low carbon solutions such as solar, hydrogen, carbon capture and storage, NextGen Gas and other climate related programs. Portfolio companies include Aurora Hydrogen, Context Labs, LongPath Technologies, Encino Environmental, Orbital Sidekick and INGU.

Also shown through our analysis is the continued opportunity to reduce carbon emissions by replacing coal with gas. 2022 was a record year for coal-fired generation across the globe. China's coal generation alone was five times that of the U.S. in 2022, and forecasters show Chinese coal-fired generation increasing through 2025. In the U.S., replacing existing coal plants with natural gas-fired generation could cut carbon dioxide power emissions by 34%, equivalent to removing all U.S. gasoline cars off the road today.

C3.3

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

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>As a midstream industry leader, we believe we can successfully leverage our business to be an early developer and adopter of clean energy technology as the world moves to a low-carbon future. Hydrogen is one such opportunity that offers versatility as a method for energy storage, a source of fuel and a raw material input for various industrial and energy-intensive processes. This key tool for decarbonization could reduce downstream GHG emissions for customers and our infrastructure network, aiding them in achieving their own emissions reduction objectives.</p> <p>Williams believes that we will need all technologies to scale hydrogen, including hydrogen produced from renewable power and that produced from electrolysis or steam methane reforming coupled with carbon capture. Williams' Hydrogen Development Program allows us to play a role in developing a new market with significant growth potential. Our experience and assets related to treating, processing, storing and transporting gas provide a pathway for us to scale the hydrogen economy. As we expand our clean hydrogen investments, we remain flexible on the method of production used as long as we are achieving the desired CO2e reductions.</p> <p>We are participating in 10 separate applications in front of the Department of Energy (DOE), including six hydrogen hub applications. The federal Bipartisan Infrastructure Law, passed and signed in 2022, includes \$8 billion for hydrogen hub applications, and we have partnered with key states and industry organizations to participate in establishing hydrogen hubs that span our entire footprint. All six of Williams' applications were advanced by the DOE in late 2022.</p> <p>Also, Williams' Corporate Venture Capital (CVC) program is investing in innovations at the forefront of the energy</p>

		<p>transition that will help Williams close the gap of emissions reduction from known technologies today. As of 2022, Williams has committed approximately \$50 million to stay on the leading edge of emerging trends and innovations at the forefront of the energy transition. In addition, Williams is evaluating over 90 startups for investment consideration. Recently, we used CVC funds to facilitate a partnership with data software company Context Labs to activate technology enabling Williams to offer differentiated services to its customers across the entire natural gas value chain.</p>
<p>Supply chain and/or value chain</p>	<p>Yes</p>	<p>Williams has started considering carbon accounting across the value chain and identifying potential opportunities for emissions reduction. As we think about our downstream and producer customers, as they are trying to meet their own targets or demands of their own customers, we discuss how we provide additional services around emission monitoring and certifications, so that they fully understand the emissions of the product that they are buying.</p> <p>Williams recognizes our impact spans beyond our own operations and has begun to expand our climate strategy to include our value chain. That is why, in 2022, Williams continued working with our customers and technology partners to offer lower-carbon products, including Williams' NextGen Gas. Williams' NextGen Gas is the next evolution of responsibly sourced natural gas—gas that has been verified at the production site as meeting specific environmental standards and practices. NextGen Gas is not only responsibly produced, but also gathered, processed, stored and transported to end users utilizing best practices to minimize environmental impact. Through Williams' NextGen Gas certification process—an industry first—NextGen Gas is securely tracked and independently certified to prove its lower emissions profile across the value chain.</p> <p>In December 2022, Williams announced the execution of agreements with Coterra Energy and Dominion Energy Virginia establishing our NextGen Gas program. Williams is leveraging block-chain secured technology via Context Labs' Decarbonization as a Service™ (DaaS™) platform to track and measure end-to-end emissions through the aggregation and reconciliation of multiple sources of data to provide a path-specific methane intensity certification that meets or exceeds industry leading measurement protocols.</p>

		<p>KPMG LLP will perform third-party verification of the methane intensity certification and low-emission attributes of next gen natural gas. By leveraging block-chain secured technology to measure end-to-end emissions, Williams can bring greater trust and transparency regarding methane intensity to our downstream markets to help customers reduce emissions and meet their climate commitments.</p>
<p>Investment in R&D</p>	<p>Yes</p>	<p>Williams participates in and contributes to research initiatives to maintain our position as a thought leader, support technological innovation and develop best practices to reduce GHG emissions for the midstream sector.</p> <p>(Situation) While we continue to focus on immediate opportunities anchored in our natural gas assets to reduce emissions, scale renewables and build a clean energy economy – we will also look forward and anticipate future innovations and technologies.</p> <p>(Task) Williams’ Corporate Venture Capital program invests in innovative technologies that facilitate a competitive advantage in accessing evolving energy markets. Corporate ventures and partnerships with startup incubators, such as Greentown Labs, demonstrate our commitment to innovation by fostering technology at the forefront of the energy transition.</p> <p>(Action) Williams pursues sustainable investments through our Corporate Venture Capital program, which invests in innovative climate change technologies such as hydrogen; carbon capture, utilization and storage; and renewable and responsible natural gas. Williams works through several pathways in this space, including:</p> <ul style="list-style-type: none"> • Investing directly into start-up companies • Participating as a limited partner in funds set up expressly to invest in low-carbon technologies • Partnering with other like-minded companies with net zero ambitions to fund the development of technical solutions for decarbonizing energy-intensive products or services <p>(Result) Since establishing the Corporate Venture Capital program, Williams has committed approximately \$50 million to stay on the leading edge of emerging trends and innovations at the forefront of the energy transition. In addition, the company is evaluating over 90 startups for investment consideration.</p>

		<p>For example, in 2022, Williams:</p> <ul style="list-style-type: none"> • Used Corporate Venture Capital funds to facilitate a partnership with data software company, Context Labs, to activate technology to enable Williams to offer differentiated services to its customers across the entire natural gas value chain. The initiative will overlay satellite monitors and blockchain technology on our core infrastructure to provide end-to-end measured, verifiable and transparent emissions data for real-time decision-making capabilities for Williams and our customers.
Operations	Yes	<p>Reducing GHG emissions from our operations is a key part of our strategy to minimize climate-related risks and realize opportunities. We support effective, voluntary programs to reduce emissions, such as Carbon Capture, Utilization and Storage (CCUS), scaling solar energy and conducting leak detection and repair (LDAR) assessments. Williams is currently utilizing CCUS, when possible, in our operations. For example, at our Dilley Amine treatment facility in Texas, we capture an amine vent stream, which is primarily carbon dioxide, and inject it into an underground disposal well. Across our land portfolio, our solar team is developing 21 projects totaling approximately 360 megawatts of solar capacity and 300 megawatts of battery capacity, as of 2022. These facilities, targeted to be in service in 2024 and subsequent years, will generate renewable energy credits that can be sold to the market or retired to offset our Scope 2 emissions.</p> <p>In 2022, Williams continued to participate as a signatory of the Interstate Natural Gas Association of America's Methane Emissions Commitment to implement methane reduction activities and performed leak surveys at all transmission and storage compressor stations by 2022. Additionally, in February 2023, Williams announced it had joined the United Nations Environment Programme's (UNEP) Oil and Gas Methane Partnership 2.0 (OGMP 2.0), the global initiative designed to improve the energy industry's methane emissions reporting and to encourage progress in reducing those emissions. Joining OGMP 2.0 supports Williams' next generation natural gas strategy to drive transparency and decarbonization of the natural gas value chain through operational investments, providing path-specific methane intensity certifications to utilities, LNG export facilities and other clean energy users.</p>

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	Capital expenditures	<p>Our strategy to address the risks and opportunities of climate change involves allocating capital and other resources to reduce emissions from our operations and invest in no/low carbon opportunities. Specific focus areas where climate-related risks and opportunities have influenced our financial planning include:</p> <ul style="list-style-type: none"> • Connecting the best supplies to the best markets to maximize transportation efficiency, improve cost-effectiveness and significantly reduce emissions; • Operating our assets efficiently through preventive maintenance and equipment upgrades and asset modernization programs to reduce emissions; • Creating the New Energy Ventures group to explore and invest in no/low carbon initiatives and solutions that help reduce emissions for Williams and our customers, in which we focus on: 1) Funding and participating in research related to emissions detection, quantification and reduction technologies; 2) Exploring and implementing renewable energy opportunities, including renewable natural gas and solar energy; • Using data analytics to identify and drive strategic emissions reduction initiatives; • Collaborating with peer companies through key industry initiatives and trade organization involvement to uncover and implement innovative best practices. <p>Time horizons: We incorporate this short-, medium- and long-term strategy into our financial planning.</p>

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	Yes, we identify alignment with our climate transition plan

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with our climate transition plan

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

279,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

13

Percentage share of selected financial metric planned to align in 2025 (%)

24

Percentage share of selected financial metric planned to align in 2030 (%)

36

Describe the methodology used to identify spending/revenue that is aligned

We have accounted for the CAPEX associated with our Modernization programs and our New Energy Ventures group, as we work toward achieving our Climate Commitment.

Modernization programs support our emissions reductions efforts on regulated infrastructure. Our modernization programs include the Emissions Reduction Program (ERP), a multi-year investment project that aims to considerably reduce NOx and methane emissions from Transco and Northwest Pipeline (NWP) compressor stations. The ERP replaces legacy compression equipment with a combination of modern, NOx-limiting natural gas-fired turbines and electric motor drive (EMD) compressors equipped with vent gas reduction systems. The projects incorporate gas recovery technology to reduce vented methane and the turbine compressors help transport natural gas using combustion technologies that go beyond current air quality regulations. Additional modernization emissions reduction spending included testing hydrogen fuel blends in reciprocating compressor engines, evaluating increased and indefinite pressurized hold during compressor downtime, replacing high-bleed pneumatic devices with low- or no-

bleed devices and installing dry seal gas capture systems at some compressor stations.

New Energy Ventures is a business development group focused on commercializing innovative technologies, markets and business models. New Energy Ventures collaborates with talent across Williams to evaluate and implement projects to grow our clean energy business.

Reporting year is based on Actuals; the percentage share is based on 2022 CAPEX exclusive of Trace Midstream and Nortex Midstream acquisitions in 2022. 2025 and 2030 percentage projections are based off 2022 long term strategic planning assumptions.

C4. Targets and performance

C4.1

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

Absolute target

C4.1a

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

Target reference number

Abs 1

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

2020

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Base year

2005

Base year Scope 1 emissions covered by target (metric tons CO2e)

22,654,753

Base year Scope 2 emissions covered by target (metric tons CO2e)

1,780,276

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

24,435,029

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

56

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

10,751,412.76

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

12,094,016.07

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

1,777,329.71

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

13,871,345.78

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]

77.1994992751

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In 2020, Williams set a near-term goal of reducing absolute greenhouse gas emissions 56% from 2005 levels by 2030, putting the company on a positive trajectory toward net zero emissions by 2050, a target we would like to achieve. By setting a near-term goal for 2030, we plan to leverage our natural gas-focused strategy and technology that is available today to reduce emissions, scale renewables and build a clean energy economy. We will do so while looking forward and anticipating innovations for the future like hydrogen and carbon capture, utilization and storage (CCUS) that will ultimately contribute to our aspiration to be net zero by 2050.

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

To reach our 2030 target, Williams is utilizing technology readily available today such as pursuing methane emissions reduction opportunities through leak detection and repair (LDAR), work practice improvements and evaluating equipment upgrades on a site-specific basis. This near-term phase also includes employing emissions reduction strategies through research organizations and trade groups in addition to modernizing gas compression equipment and adding emissions control technologies, such as blowdown and seal vent capture, as part of our emissions reduction program. Williams has also joined the midstream Quantification, Monitoring, Reporting and Verification (QMRV) program, which in 2022 included an extensive testing of additional aerial and on-site methane monitoring technologies. Williams is also exploring the use of solar power generation to support the power needs of specific natural gas transmission and processing operations sites. Our 2030 target shows our commitment to executing on opportunities in the here and now and holds our leadership accountable for near-term action and performance.

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

Net-zero target(s)

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

Absolute

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

Methane reduction target

Other, please specify

Methane emissions reduction (%)

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

0

Target year

2022

Figure or percentage in target year

5

Figure or percentage in reporting year

16.5

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

330

Target status in reporting year

Achieved

Is this target part of an emissions target?

Yes, our absolute (Abs 1) and net zero (NZ 1) targets apply to all Scope 1 and 2 (location-based) carbon emissions including methane. Methane makes up approximately 16% of our total Scope 1 and 2 emissions.

Is this target part of an overarching initiative?

Other, please specify

ONE Future 2025 methane intensity goals

Please explain target coverage and identify any exclusions

Williams established a new methane emissions reduction goal in 2022 to reduce 2022 methane emissions (Scope 1 and Scope 2) of assets under Williams' operation control by 5% compared to the 3-year (2019-2021) baseline average, according to AIP calculation methodology. The methane emissions reduction goal will be continued in 2023.

List the actions which contributed most to achieving this target

We employ several mechanisms to continuously minimize methane emissions from our interstate natural gas transmission and storage operations that focus on reductions from pipeline blowdowns, pneumatic controllers, compressor packing and leaking components. Williams' operating areas are actively purchasing and installing equipment to reduce methane emissions where opportunities are identified. Examples include replacing higher bleeding pneumatic controllers with low bleed controllers and replacing gas pneumatic pumps with non-emitting electric pumps on dehydrator systems.

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Target year for achieving net zero

2050

Is this a science-based target?

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

Please explain target coverage and identify any exclusions

In 2020, Williams set a near-term goal of reducing absolute greenhouse gas emissions 56% from 2005 levels by 2030, putting the company on a positive trajectory toward net zero emissions by 2050, a target we would like to achieve. By setting a near-term goal for 2030, we plan to leverage our natural gas-focused strategy and technology that is available today to reduce emissions, scale renewables and build a clean energy economy. We have also allocated budget to and built partnerships for innovations in solar power, emissions monitoring, hydrogen and carbon capture, utilization and storage (CCUS) that will ultimately contribute to our aspiration to be net zero by 2050. Like our near-term absolute 2030 target, we hope to achieve net zero emissions by 2050 when compared to a 2005 baseline, which includes Williams' Scope 1 and 2 emissions.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

Williams already utilizes carbon capture, utilization and storage (CCUS) in our operations. For example, at our Dilley Amine treatment facility in Texas, we capture an amine vent stream, which is primarily carbon dioxide, and inject it into an underground disposal well. Williams will continue evaluating CCUS opportunities through our CCUS Development Program.

Williams has been identifying locations where solar power installations are economical and can primarily be sited on land adjacent to existing Williams owned facilities. Across our land portfolio, our solar team is developing 21 projects totalling approximately 360 megawatts of solar capacity and 300 megawatts of battery capacity. These facilities, targeted to be in service in 2024 and subsequent years, will generate renewable energy credits that can be sold to the market or retired to offset our Scope 2 emissions.

Williams is evaluating and developing hydrogen pilot projects along our entire infrastructure footprint. Williams is participating in 10 separate applications in front of the Department of Energy (DOE), including six hydrogen hub applications. The federal Bipartisan Infrastructure Law, passed and signed in 2022, includes \$8 billion for hydrogen hub applications, and we have partnered with key states and industry organizations to participate in establishing hydrogen hubs that span our entire footprint. All six of Williams' applications were advanced by the DOE in late 2022. In addition, Williams is working in partnership with the states of Arkansas, Louisiana and Oklahoma with a goal to supply NextGen Gas to hydrogen plants and deliver hydrogen blends to homes and businesses across the region. Williams is well positioned to scale hydrogen nationwide by leveraging our existing gas pipeline infrastructure. In Louisiana, we estimate that just a 10% blend of hydrogen in our infrastructure could offset the heating emissions of half of the homes in the state.

Also, Williams' Corporate Venture Capital (CVC) program is investing in innovations at the forefront of the energy transition that will help Williams close the gap of emissions reduction from known technologies today. As of 2022, Williams has committed approximately \$50 million to stay on the leading edge of emerging trends and innovations at the forefront of the energy transition. In addition, Williams is evaluating over 90 startups for investment consideration.

Planned actions to mitigate emissions beyond your value chain (optional)

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 CO ₂ e savings in metric tonnes CO ₂ e (only for rows marked *)
Under investigation	18	0
To be implemented*	2	13,000
Implementation commenced*	0	0
Implemented*	2	235,650
Not to be implemented	0	0

C4.3b

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

Initiative category & Initiative type

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

Estimated annual CO₂e savings (metric tonnes CO₂e)

229,450

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

Scope 1
 Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

3,362,348

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

0

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

In 2022, Williams implemented the AIP Methane Reduction Goal. This metric measures the company's total methane emissions from assets under operational control of Williams and establishes an annual company-wide methane emissions reduction goal. The 2022 goal was to reduce methane emissions by 5% less methane than the 3-Year (2019-2021) average baseline of 55,626 metric tons, according to AIP calculation methodology. Williams outperformed the target by achieving a 16.5% reduction in total methane emissions for a reduction of 9,178 metric tons methane or 229,450 metric tons CO₂e.

Initiative category & Initiative type

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

Estimated annual CO₂e savings (metric tonnes CO₂e)

6,200

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

Scope 1

Voluntary/Mandatory

Mandatory

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

734,874

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

44,300,000

Payback period

4-10 years

Estimated lifetime of the initiative

Ongoing

Comment

In 2022, under the Northwest Pipeline Emissions Reduction Program, we replaced four vintage gas-driven reciprocating compressor units, producing approximately 8,000-site-rated horsepower to compress natural gas for pipeline transmission services, with one low-NO_x gas-fired turbine at our Rangely Compressor Station. This project was compliance-related to meet strict guidelines enacted by the state of Colorado. The Colorado Department of Health approved a new rule regarding the reduction of

combustion emissions from engines. As a result, we experienced reductions of averaged annual emissions by approximately 740 tons of NOx and 6,200 metric tons of CO2e emissions per year. Annual monetary savings includes CO2e savings (6,200 metric tons CO2e x Social Cost of Carbon \$51/ton CO2e) of \$314,874 and maintenance savings of \$420,000.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	<p>Diligent compliance with environmental and regulatory requirements is vital to managing our environmental impacts. The Williams Integrated Management System (WIMS) provides Williams-specific guidelines and policies for employees to follow, including compliance with regulations and industry standards. WIMS includes requirements for monitoring greenhouse gas (GHG) emissions, complying with federal reporting and addressing fugitive emissions through our regulatory and voluntary LDAR programs. We prepare and submit an annual GHG emissions inventory to the U.S. Environmental Protection Agency for our midstream gathering, natural gas processing and interstate transmission and storage operations. We also track and report Scope 1 and Scope 2 emissions data in accordance with the Greenhouse Gas Protocol. Scope 1 emissions are those that come from operating our assets. Scope 2 emissions include indirect sources, such as the purchase of electricity to power compressor stations. Accurately tracking GHG emissions with measurable data enables us to identify opportunities to reduce energy consumption and increase operational efficiency.</p>
Dedicated budget for low-carbon product R&D	<p>Our New Energy Ventures group explores and invests in no/low carbon initiatives and solutions that help reduce emissions for Williams and our customers, in which we focus on 1) Funding and participating in research related to emissions detection, quantification and reduction technologies; and 2) Exploring and implementing renewable and low-carbon energy opportunities, including renewable natural gas, solar energy, NextGen Gas and hydrogen.</p> <p>Williams' Corporate Venture Capital (CVC) program is an outgrowth of our New Energy Ventures. In 2022, we allocated about \$50 million toward investment in startups, new technologies and new initiatives through our CVC program. These initiatives include no/low carbon solutions such as solar, hydrogen, carbon capture and storage, NextGen Gas and other climate related programs. Portfolio companies include Aurora Hydrogen, Context Labs, LongPath Technologies, Encino Environmental, Orbital Sidekick and INGU.</p>

	<p>Additionally, Williams is exploring renewable energy opportunities, including renewable natural gas (RNG), a low-carbon or carbon-negative substitute for fossil-derived natural gas that is typically captured and transported from landfill waste, municipal water treatment, livestock farm or food waste facilities.</p>
<p>Dedicated budget for other emissions reduction activities</p>	<p>Our business units are reducing methane emissions through leak detection and repair, work practice improvements and evaluating equipment upgrades on a site-specific basis. For example, as part of our emissions reduction program, we are modernizing gas compression equipment and adding emissions control technologies, such as blowdown and seal vent capture. We are also planning, developing and executing projects to upgrade and modernize our gas networks. In 2022, Williams developed new guidance on reducing emissions during pipeline purging and implemented the guidance into our existing operating procedures. For example, when purging pipelines that are being returned to service, we made it a requirement to use air dryers instead of natural gas to dry the pipe. Our senior leaders shared guidance with operations and project execution groups to reinforce the importance of responsibly managing pipeline purging activities.</p> <p>We are evaluating using our land to build large-scale solar and storage facilities for third-party energy demand. Across our land portfolio, our solar team is developing 21 projects totalling approximately 360 megawatts of solar capacity and 300 megawatts of battery capacity. These facilities, targeted to be in service in 2024 and subsequent years, will generate renewable energy credits that can be sold to the market or retired to offset our Scope 2 emissions.</p> <p>Our Renewable Natural Gas (RNG) program includes constructing new interconnects and pipeline extensions, as well as investments in RNG production. These investments will generate environmental attributes that can either be sold into the market or retired to offset our own emissions.</p> <p>Our Carbon Capture, Utilization and Storage (CCUS) Development Program reduces emissions by removing carbon dioxide from point sources and either adapts it for further beneficial use or stores it permanently underground. Participating in the CCUS value chain can reduce the emissions of our own and our customers' operations.</p> <p>With our Hydrogen Development Program, we are evaluating the impact of hydrogen blending on pipelines and compressor assets; pursuing potential commercial opportunities across Transco and</p>

	<p>Northwest Pipeline for clean hydrogen production, transportation, storage and energy hubs; and advocating for hydrogen development with associations, universities and government activity.</p>
<p>Employee engagement</p>	<p>Williams' commitment to supporting the communities our employees call home extends beyond financial support. With supervisor approval, during work hours, employees may volunteer with charitable organizations that address critical needs and fuel their passions. We also fund employee-driven charitable giving programs, including our homegrown giving and matching gifts programs. Our homegrown giving program enables employees to support the unique needs of their local communities through grants designed to support eligible, non-profit organizations.</p> <p>Over the past five years, Williams has contributed more than \$57 million to support local communities. One focus area of our giving is environmental stewardship, helping to drive investment in various emissions reduction activities.</p>
<p>Internal incentives/recognition programs</p>	<p>A majority of our employees are eligible for Williams' Annual Incentive Program (AIP), as a part of our overall pay strategy and total rewards package. There are two emissions reduction targets that drive internal performance for eligible employees, and these include our loss of primary containment event reduction target and new methane emissions reduction goal.</p> <p>Additionally, through Williams' safety champion awards, we focus on process safety and incident avoidance. This focus includes attention given to releases of natural gas. By incentivizing and recognizing exceptional safety performance, we are able to also drive investment in our emissions reductions.</p>
<p>Partnering with governments on technology development</p>	<p>There are several examples of how Williams has partnered with governments on technology development, including focusing on operational efficiency improvements and emerging fuels.</p> <p>Beyond making existing systems more efficient, an important focus area of Williams is to explore new fuels, including hydrogen. Williams is a founding board member of the Clean Hydrogen Future Coalition, a newly launched coalition that supports the adoption of clean hydrogen in the U.S. Together with fellow energy companies, public sector stakeholders, labor unions, utilities, nongovernmental organizations, equipment suppliers and project developers, we will identify specific actions that the United States can take to create and scale the clean hydrogen economy. We specifically partnered with a government agency to advance technology development by evaluating the creation of a hydrogen hub in Wyoming. After winning a grant from the Wyoming Energy Authority, Williams partnered with the University of</p>

	<p>Wyoming to study and evaluate the production and transport of hydrogen power in Wamsutter and Opal, Wyoming. The Wyoming Energy Authority combines the existing scopes of the Wyoming Infrastructure Authority, Wyoming Pipeline Authority and the State Energy Office, effectively consolidating Wyoming’s energy program into one entity that works to advance the state’s energy strategy by supporting Wyoming’s full energy portfolio. The Wyoming Energy Authority is governed by a board of seven voting members appointed by the Governor and confirmed by the Senate. Five dedicated ex-officio members participate to ensure collaboration across Wyoming’s energy and business development organizations. In 2022, Williams successfully completed hydrogen blend testing into a reciprocating compressor engine. Hydrogen blends up to 30% in the fuel gas were tested, and the flue gas emissions were monitored throughout the testing. Results showed reductions in CO2e emissions, improved combustion efficiencies that reduced methane slip and other unburnt hydrocarbon emissions. This project is set to be completed in June 2023 and Williams intends to share the knowledge gained across the industry.</p> <p>Williams is also actively evaluating opportunities to collaborate with the U.S. Department of Energy, both in developing pilot programs to research new technologies and in exploring carbon capture and storage advancements.</p>
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C4.5

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

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

EIA US Energy Information Administration

Type of product(s) or service(s)

Power

Other, please specify
Renewable Natural Gas (RNG)

Description of product(s) or service(s)

Williams continues our advancement of renewable natural gas (RNG), a low-carbon or carbon-negative substitute for fossil-derived natural gas typically captured and transported from landfill waste, municipal water treatment, livestock farm or food waste facilities. As part of our RNG efforts, we construct new interconnects and pipeline extensions and invest in RNG production. These investments will generate environmental attributes, such as California Low Carbon Fuel Standards credits, EPA Cellulosic Biofuel Renewable Identification Numbers, Renewable Thermal Credits, or Voluntary Carbon Offsets, which can be sold to the market or retired to offset our emissions.

Williams delivers RNG by partnering with renewable energy developers across the U.S. to transport captured methane emissions from landfills or dairy farms, where it is a byproduct of the waste decomposition process. Williams' pipeline systems are interconnected with seven RNG facilities as of May 2023. This diverts for beneficial use a volume of natural gas that would have otherwise been emitted or combusted as waste onsite, equivalent 10,500,000 metric tons CO₂e or to removing 2,335,568 gasoline-powered passenger cars from the road for one year.

Williams continues working with our customers to identify opportunities to bring RNG on our pipeline system. Williams also continues to evaluate partnerships to generate renewable gas and provide the needed infrastructure to gather those resources cost-effectively.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify
EPA Greenhouse Gas Equivalencies Calculator

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

End-of-life stage

Functional unit used

Volume of RNG diverted by Williams pipelines interconnected to seven RNG facilities

Reference product/service or baseline scenario used

Equivalent volume of Geologic Natural Gas

Life cycle stage(s) covered for the reference product/service or baseline scenario

Cradle-to-grave

Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

10,500,000

Explain your calculation of avoided emissions, including any assumptions

The above calculation is a measure of what would have been emitted from various landfill sites and dairy farm operations, had they not been captured from use. The CO₂ equivalent and gasoline powered vehicles driven for one year are metrics generated from the EPA's Greenhouse Gas Equivalencies Calculator using the volume of methane that was recovered for use as RNG.

This estimated avoided emissions is equivalent to removing 2,335,568 gasoline-powered passenger cars from the road for one year.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

1

C-OG4.6

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

Methane emissions in 2022 totaled 2.2382 million MT CO₂e, making up an estimated 16% of Williams' assets' Scope 1 and 2 greenhouse gas emissions profile in 2022, and we pay particular attention to reducing methane emissions. We employ several mechanisms to continuously minimize methane emissions from our interstate natural gas transmission and storage operations that focus on reductions from pipeline blowdowns, pneumatic controllers, compressor packing and leaking components. Williams' operating areas are actively purchasing and installing equipment to reduce methane emissions where opportunities are identified. Examples include replacing higher bleeding pneumatic controllers with low bleed controllers and replacing gas pneumatic pumps with non-emitting electric pumps on dehydrator systems. Specifically, in 2022, Williams implemented a purging emissions reduction standard and extended hold programming into compressor controls to reduce blowdowns.

In 2022, Williams recalculated our methane related emissions according to the EPA's published proposed changes for the rules in 40 CFR 98 – Mandatory Greenhouse Gas Reporting. These changes relate to the emission factors required for natural gas compressor engine drivers located at facilities reporting to address methane slip. After reviewing our own stack testing information, Williams agreed with the EPA's new emissions factors and updated our methane-related emissions data a full year ahead of the EPA's schedule. By updating our emissions factors a year ahead of mandated timelines, Williams has positioned itself as an industry leader in methane disclosure and reduction efforts.

To promote strong governance across the enterprise over environmental practices, in 2022, Williams incorporated a new target into our Annual Incentive Program (AIP) to reduce 2022 methane emissions by 5% compared to the 3-year (2019-2021) baseline average. Alongside

this target, we will continue to reduce our loss of primary containment (LOPC) events, including the unplanned or uncontrolled release of methane. We can influence short-term annual incentives for all employees eligible for our AIP by achieving these targets. We weighted the methane emissions and LOPC goals each at 5% of our 2022 AIP for all eligible employees, including executives. We intend to include both metrics in our 2023 AIP, extending the effective timeline of this initiative by one year.

We work with external organizations through funding and program leadership to support efforts that reduce GHG emissions from our industry. For example, Williams is a member of the Collaboratory for Advancing Methane Science (CAMS), an industry-led research consortium that works to better characterize and understand methane emissions. CAMS members work collaboratively to provide actionable, transparent methane science to contribute to the understanding of methane emissions across the oil and gas value chain and inform mitigation strategies. Williams, along with partner companies and academia, completed seven research papers through CAMS in 2022, all relating to better understanding and measuring methane emissions within the natural gas value chain. Additionally, Williams became a founding sponsor of the Energy Emissions Modeling and Data Lab (EEMDL) in 2022, which is an initiative launched by UT Austin, Colorado State University (CSU) and Colorado School of Mines with the mission to provide reliable, transparent, science-based and measurement-based GHG assessments of global oil and gas supply chains. Three key approaches are: developing community models and tools for greenhouse gas emissions assessments; making publicly available timely, high-resolution emissions datasets; and creating educational and training materials to enable widespread use of EEMDL's models and data. Williams continues to provide funding to CSU's Methane Emissions Technology Evaluation Center (METEC) for a platform for researchers to test and develop new, innovative technology to measure methane emissions. METEC also connects researchers with industry partners to facilitate energy technology development and prepares students for careers in energy and clean technology. We are also a member of the Texas Methane and Flaring Coalition, which is coalition focused on identifying and promoting best practices for the reduction of flaring and methane emissions in Texas.

Additionally, in February 2023, Williams announced it had joined the United Nations Environment Programme's Oil and Gas Methane Partnership 2.0 (OGMP 2.0), the global initiative designed to improve the energy industry's methane emissions reporting and to encourage progress in reducing those emissions. Joining OGMP 2.0 supports Williams' next generation natural gas strategy to drive transparency and decarbonization of the natural gas value chain through operational investments, providing path-specific methane intensity certifications to utilities, LNG export facilities and other clean energy users.

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.

Williams operates more than 33,000 miles of pipeline across 25 U.S. states and offshore in the Gulf of Mexico. We regularly complete integrity assessments of pipelines and repairs for identified defects. These non-destructive inspections on our facilities use various technologies to monitor, measure and mitigate corrosion. Our control centers monitor pipelines for flow, pressure, temperature and other factors and include automated system response to potential leak conditions. We train pipeline control specialists to recognize abnormal conditions that could result in a pipeline leak or rupture. This training includes emergency response exercises for potential leaks and ruptures.

Williams uses infrared cameras to identify and repair leaking equipment. We conduct quarterly, semi-annual or annual LDAR surveys on Williams' compressor stations and facilities using an optical gas imaging (OGI) camera. Williams' LDAR surveys are an effective work practice in significantly reducing emissions of fugitive methane to the environment. In 2022, through the WillDAR program, we performed leak surveys using OGI at 43 Transco and Northwest Pipeline compressor stations that did not previously have LDAR required by state or federal regulations. By implementing WillDAR and achieving quicker recognition of repaired leaks using quarterly surveys, reported equipment component emissions at transmission compressor stations decreased by an estimated 25% from 2021 to 2022. Williams has developed separate LDAR Standards for our gathering and boosting and transmission segments and is developing a comprehensive requirement within our integrated management system that outlines roles and responsibilities for LDAR. Once completed, we will use these to communicate the roles and responsibilities of Williams' employees for promoting an improved, efficient and effective LDAR program across the enterprise.

As part of our loss of primary containment (LOPC) initiatives, Williams encourages our operators to listen, look and smell for any fugitive emissions on their regular rounds. Any LOPC discovered through AVO (audio, visual, olfactory) is recorded in our Environmental Management System so that we can record performance and learn from even the smallest leaks.

Williams uses a single software platform, Leak Tracker Pro™ (LTP), to maintain leak records from OGI surveys conducted in the Williams gathering and boosting and transmission sectors. Use of LTP allows for improved surveys, record keeping and in-depth look at trends. LTP results help accurately identify leaking equipment components to repair them. Williams analyzes LTP results to reduce future leaks at our facilities, helping to achieve our emissions reduction targets.

In 2022, Williams expanded its greenhouse gas quantification, monitoring, reporting, and verification (QMRV) program that studies, evaluates and implements advanced technologies to

better understand the emissions. Williams leveraged publicly available satellite data to identify potential methane sources. We plan to integrate higher resolution and more frequent site-specific satellite data for emissions reduction and compliance tasks. In 2023, Williams plans to implement additional continuous monitoring technologies paired with other sensors and IT devices to capture more relevant operations and emissions data on-site to improve the emissions reduction insights machine learning software through Context Labs.

(Situation) We use infrared cameras to quickly identify leaking equipment, and we conduct quarterly, semi-annual or annual LDAR surveys on Williams' compressor stations and facilities using an optical gas imaging (OGI) camera.

(Task) Surveys conducted through Williams' Leak Detection and Repair Program (WiILDAR) are an effective work practice to significantly reduce fugitive methane emissions to the environment.

(Action) In 2022, through the WiILDAR program, we performed leak surveys using OGI at 43 Transco and Northwest Pipeline compressor stations that did not previously have LDAR required by state or federal regulations. Also, Williams has developed separate LDAR Standards for our gathering and boosting and transmission segments and is developing a comprehensive requirement within our integrated management system that outlines roles and responsibilities for LDAR.

(Result) By implementing WiILDAR and achieving quicker recognition of repaired leaks using quarterly surveys, reported equipment component emissions at transmission compressor stations decreased by an estimated 25% from 2021 to 2022. Once our comprehensive LDAR requirement is finalized, we will use it to communicate the roles and responsibilities of Williams' employees for promoting an improved efficient and effective LDAR program across the enterprise. Through these actions, Williams met our Methane Emissions Commitment by surveying all our transmission and storage compressor stations by 2022 and continues to pursue opportunities to reduce our methane emissions.

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.

Williams owns an interest in but does not operate production assets or otherwise have oil and gas production activities, therefore it is not relevant to our midstream facilities. While flaring as a whole is not relevant, we do have flares at processing plants in the event of process disruptions or emergency events. We are also required in some states to have regularly operating flares to reduce VOCs to the atmosphere. We do not have any flares targeting methane.

Williams works to help reduce flaring from upstream producers. When our gathering and processing facilities unexpectedly go off-line, this can cause flaring at the production well pad. By maintaining high reliability of our compression, we reduce or eliminate this situation. We use

a metric "customer impacted volumes" in our front-line employee bonus program to align our team on this effort.

As an example of our efforts to reduce flaring, in 2019, Williams filed a lawsuit in Travis County, Texas, challenging the Railroad Commission's decision to allow Exco Operating Co. LP to burn off gas at 130 oil wells in South Texas. Even though Williams operates a gathering system that connects to those wells and could have transported that gas to market, the Railroad Commission authorized the flaring because it wasn't profitable for Exco to sell the gas. Limiting flaring permits regardless of economic conditions will help prevent unnecessary flaring emissions.

Williams is a member of the Texas Methane and Flaring Coalition, which is focused on identifying and promoting best practices for reducing flaring and methane emissions in Texas. Williams is a Coalition member, along with all of Texas' oil and gas trade associations and over 40 oil and gas companies.

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, an acquisition

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

Trace Midstream
NorTex Midstream

Details of structural change(s), including completion dates

In April 2022, we acquired the Haynesville gathering and processing assets of Trace Midstream, a portfolio company of Quantum Energy Partners. This transaction expands our gathering capacity in the large and efficient Haynesville basin of east Texas from 1.8 billion cubic feet per day to over 4.0 billion cubic feet per day. As part of the transaction, Williams committed to an agreement with Rockcliff Energy that connects sustainable NextGen Gas gathered in the Haynesville basin to key markets along our Transco pipeline and growing LNG export demand. We also acquired NorTex Midstream in

August 2022, which added 80 miles of natural gas transmission pipelines and 36 billion cubic feet of natural gas storage to Williams' footprint. This acquisition enhances our core natural gas strategy and supports the viability of intermittent renewables like solar and wind. Williams has included the full 2022 calendar year greenhouse gas emissions from both of these acquisitions in its 2022 reporting even though revenue generation to Williams did not begin until official ownership part way through the year.

C5.1b

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

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in methodology Yes, a change in boundary	<p>In 2022, the U.S. EPA published proposed changes for the rules in 40 CFR 98 – Mandatory Greenhouse Gas Reporting. This rule requires facilities that emit 25,000 metric tons or more of greenhouse gases (GHG) to annually report their GHG emissions. Reporters would carry out the changes for the 2023 reporting year (submitted April 1, 2024).</p> <p>Specifically, the EPA proposed changes to the emission factors required for natural gas reciprocating compressor engine drivers located at facilities reporting to EPA to address methane slip. After reviewing EPA's proposal with supporting data, our own stack testing information, and engine specification information provided by Caterpillar, Williams agreed with the EPA that new emissions factors were warranted. Williams used EPA's AP-42 emissions factors for reciprocating engines to be consistent with ONE Future reporting methodology. Williams updated our methane-related emissions data a full year ahead of the EPA's proposed schedule. We updated methane-related emissions for reciprocating engines at all of our facilities, not just those reporting to EPA.</p> <p>The proposed changes discuss methane slip from natural gas compressor engine drivers. Methane slip (also called combustion slip) is unburned methane entrained in the exhaust of natural gas compressor engines. Existing factors used in EPA's Mandatory Greenhouse Gas Reporting Rule for reciprocating compressor engines do not account for methane slip. Accounting for methane slip increases the amount of reported methane from the combustion of natural gas by reciprocating compressor engines. Studies cited in the proposal indicate that the type of reciprocating engine (not the</p>

		<p>sector it operates in) increases methane slip. Lean-burn (2-stroke and 4-stroke) engines are expected to have higher methane slip than rich-burn engines (4-stroke).</p> <p>Additionally, in 2022, Williams altered our boundary and began including offshore blowdowns and other large release events in our Scope 1 emissions data. We also began including corporate buildings and liquid pump stations in our Scope 2 emissions. These changes resulted in a total increase of 134,170 metric tons CO₂e.</p>
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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	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years’ recalculation
Row 1	Yes	Scope 1	When a new emissions source is identified, or a previously reported emissions source calculation methodology is identified to be understating its emissions total, the base year emissions will be recalculated if either result in an increase of 5% of the base year CO ₂ e emissions total.	Yes

C5.2

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

Scope 1

Base year start

January 1, 2005

Base year end

December 31, 2005

Base year emissions (metric tons CO₂e)

22,654,753

Comment

2005 is the baseline year for our absolute reduction target and net zero target.

Scope 2 (location-based)

Base year start

January 1, 2005

Base year end

December 31, 2005

Base year emissions (metric tons CO₂e)

1,780,276

Comment

2005 is the baseline year for our absolute reduction target and net zero target.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Not evaluated. We have not evaluated our Scope 3 greenhouse gas emissions and thus are unable to evaluate if this will be a significant source of Scope 3 greenhouse gas emissions.

Scope 3 category 2: Capital goods

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Not evaluated. We have not evaluated our Scope 3 greenhouse gas emissions and thus are unable to evaluate if this will be a significant source of Scope 3 greenhouse gas emissions.

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

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Relevant, not evaluated. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, gas and natural gas liquids products are transferred by third party truck, rail and pipeline systems. We estimate that fuel-and-energy related activities (not included in Scope 1 or 2) will be a significant source of Scope 3 greenhouse gas emissions.

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from upstream transportation and distribution. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of waste generated in operations. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Scope 3 category 6: Business travel

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

1,398

Comment

Passenger vehicle emissions were calculated by using the EPA passenger vehicles/year method. An emission factor of 4.6 metric tons CO₂e/vehicle/year was used. Using the distance-based method calculation for airline miles, the emission factor used was 0.217 kg CO₂e/mi per passenger from carbonfund.org. Hotel stays were calculated at a rate of 15.13 kg CO₂e/room day, also sourced from carbonfund.org.

Scope 3 category 7: Employee commuting

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

24,780

Comment

U.S. Environmental Protection Agency March 2020 emission factors (0.335 kg CO₂ per mile for a typical passenger vehicle, 0.000009 kg CH₄ per mile for a typical passenger vehicle, 0.000008 kg N₂O per mile for a typical passenger vehicle) and assuming a 30 mile one way commute for each of Williams' 4,705 full-time employees as of June 2021.

Scope 3 category 8: Upstream leased assets

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from upstream leased assets. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from downstream transportation and distribution. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from processing of sold products. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Scope 3 category 11: Use of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

19,275,187

Comment

Emissions reported according to Subpart NN – Suppliers of Natural Gas & Natural Gas Liquids, part of the EPA Greenhouse Gas Reporting Program (GHGRP)

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

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we do not have end of life treatment of sold products. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions and we estimate the emissions to be zero (0).

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from downstream leased assets. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Scope 3 category 14: Franchises

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we do not have franchises. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions and we estimate the emissions to be zero (0).

Scope 3 category 15: Investments

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

We have not evaluated our Scope 3 emissions and thus are unable to determine if this will be a significant source of Scope 3 greenhouse gas emissions.

Scope 3: Other (upstream)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we do not have other (upstream) emissions. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions and we estimate the emissions to be zero (0).

Scope 3: Other (downstream)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

Comment

Not relevant. Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we do not have other (downstream) emissions. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions and we estimate the emissions to be zero (0).

C5.3

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

The Greenhouse Gas Protocol: Public Sector Standard

US EPA Mandatory Greenhouse Gas Reporting Rule

Other, please specify

Methane Emissions Estimation Protocol ONE Future

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)

12,094,016.07

Start date

January 1, 2022

End date

December 31, 2022

Comment

Gross direct (Scope 1) greenhouse gas emissions in metric tons of CO₂-equivalent (CO₂e). The consolidation approach is operational control and includes CO₂, CH₄ and N₂O. Emissions are based on calendar years. Emissions from facilities that are applicable under the U.S. EPA Greenhouse Gas Reporting Program (GHGRP) are

calculated using the GHGRP methodology. Emissions from facilities that are not applicable to the GHGRP due to reporting thresholds are calculated referencing GHGRP and ONE Future protocols. In accordance with ONE Future's updated (2022) protocol, Scope 1 emissions for 2022 incorporate AP-42 methane slip emission factors for reciprocating engines. Scope 1 emissions for 2022 include two additional new sources: offshore blowdowns and other large release events. Scope 1 emissions for 2018 - 2021 have been restated to include AP-42 methane slip emission factors, offshore blowdowns and other large release events for comparison. Methane emissions that aren't applicable under GHGRP or ONE Future protocol (offshore blowdowns and other large release events for 2018 - 2022) are calculated using GHGRP protocols or best engineering practice. Data excludes emissions from company vehicles. Global Potential Warming rates are 25 for CH₄ and 298 for N₂O. Williams does not produce biogenic gases from its direct operations. Williams does not produce hydrochlorofluorocarbons, perfluorocarbons, sulfur hexafluoride or nitrogen trifluoride emissions.

Past year 1

Gross global Scope 1 emissions (metric tons CO₂e)

11,268,100

Start date

January 1, 2021

End date

December 31, 2021

Comment

Scope 1 emissions for 2018 - 2021 have been restated to include AP-42 methane slip emission factors, offshore blowdowns and other large release events for comparison.

Past year 2

Gross global Scope 1 emissions (metric tons CO₂e)

11,442,700

Start date

January 1, 2020

End date

December 31, 2020

Comment

Scope 1 emissions for 2018 - 2021 have been restated to include AP-42 methane slip emission factors, offshore blowdowns and other large release events for comparison.

Past year 3

Gross global Scope 1 emissions (metric tons CO₂e)

12,194,400

Start date

January 1, 2019

End date

December 31, 2019

Comment

Scope 1 emissions for 2018 - 2021 have been restated to include AP-42 methane slip emission factors, offshore blowdowns and other large release events for comparison.

Past year 4

Gross global Scope 1 emissions (metric tons CO2e)

11,742,300

Start date

January 1, 2018

End date

December 31, 2018

Comment

Scope 1 emissions for 2018 - 2021 have been restated to include AP-42 methane slip emission factors, offshore blowdowns and other large release events for comparison.

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

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

Comment

C6.3

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

Reporting year

Scope 2, location-based

1,777,329.71

Start date

January 1, 2022

End date

December 31, 2022

Comment

Gross location-based energy indirect (Scope 2) greenhouse gas emissions in metric tons of CO₂-equivalent (CO₂e). The consolidation approach is operational control. 2022 emissions were calculated using U.S. EPA Power Profiler Emissions Tool 2021, using emission factors from U.S. EPA eGRID2021 multiplied by kWh energy use for all assets that Williams operates. In 2022, Williams began including corporate office buildings in its Scope 2 emissions reporting.

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

Company vehicles

Scope(s) or Scope 3 category(ies)

Scope 1

Relevance of Scope 1 emissions from this source

Emissions are not relevant

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

0.1

Explain why this source is excluded

Williams has a fleet of company vehicles that generate approximately 11,000 metric tons of greenhouse gas emissions annually using the U.S. Environmental Protection Agency April 2021 emission factor of 0.341 kg CO₂ per mile for a typical passenger vehicle, 0.000009 kg CH₄ per mile for a typical passenger vehicle, 0.000008 kg N₂O per mile for a typical passenger vehicle and using the total miles driven by company

vehicles. These emissions are estimated to represent less than 1% of our overall Scope 1 and 2 emissions footprint and are considered de minimis.

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

Using the yearly fleet vehicle mileage and emissions factors for Business Travel and Employee Commuting from the EPA, emissions were estimated.

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

Not evaluated

Please explain

We have not evaluated our Scope 3 greenhouse gas emissions and thus are unable to evaluate if this will be a significant source of Scope 3 greenhouse gas emissions.

Capital goods

Evaluation status

Not evaluated

Please explain

We have not evaluated our Scope 3 greenhouse gas emissions and thus are unable to evaluate if this will be a significant source of Scope 3 greenhouse gas emissions.

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

Evaluation status

Relevant, not yet calculated

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, gas and natural gas liquids products are transferred by third party truck, rail and pipeline systems. We estimate that fuel-and-energy related activities (not included in Scope 1 or 2) will be a significant source of Scope 3 greenhouse gas emissions.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from upstream transportation and distribution. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of waste generated in operations. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions

Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

2,896

Emissions calculation methodology

Average data method

Distance-based method

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

0

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, the emissions from business travel are proportionally small. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions. Business travel emissions for 2022 were less than 3,000 metric tons of CO₂e total. Passenger vehicle emissions were calculated by using the EPA passenger vehicles/year method. An emission factor of 4.6 metric tons CO₂e/vehicle/year was used. Using the distance-based method calculation for airline miles, the emission factor used was 0.217 kg CO₂e/mi per passenger from carbonfund.org. Hotel stays were calculated at a rate of 15.13 kg CO₂e/room day, also sourced from carbonfund.org.

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

26,786

Emissions calculation methodology

Average data method

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

0

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from employee commuting. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions. Employee commuting is less than 27,000 metric tons CO2e per year, using the U.S. Environmental Protection Agency April 2021 emission factor of 0.341 kg CO2 per mile for a typical passenger vehicle, 0.000009 kg CH4 per mile for a typical passenger vehicle, 0.000008 kg N2O per mile for a typical passenger vehicle and assuming a 30-mile one way commute for each of Williams' approximately 5,000 full-time employees as of June 2023.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from upstream leased assets. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from downstream transportation and distribution. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from processing of sold products. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

22,088,300.54

Emissions calculation methodology

Site-specific method

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

0

Please explain

We have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, so the use of sold products is a significant source of Scope 3 greenhouse gas emissions. These emissions are reported according to Subpart NN – Suppliers of Natural Gas & Natural Gas Liquids. Subpart NN CO2e emissions are from purity products (ethane, propane, butane, and pentanes plus) produced and sold from Williams' fractionation facilities. These CO2e emissions are calculated using the conservative assumption that all purity products are combusted by downstream consumers and are not used in synthetic organic chemical production.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we do not have end of life treatment of sold products. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions and we estimate the emissions to be zero (0).

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we have proportionally small amounts of emissions from downstream leased assets. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we do not have franchises. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions and we estimate the emissions to be zero (0).

Investments

Evaluation status

Not evaluated

Please explain

We have not evaluated our Scope 3 emissions and thus are unable to determine if this will be a significant source of Scope 3 greenhouse gas emissions.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we do not have other (upstream) emissions. Therefore, we do not anticipate this being a material source of Scope 3 greenhouse gas emissions and we estimate the emissions to be zero (0).

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

Since we have operations across the natural gas value chain, including gathering, processing, interstate transportation and storage of natural gas and natural gas liquids, we do not have other (downstream) emissions. Therefore, we do not anticipate this

being a material source of Scope 3 greenhouse gas emissions and we estimate the emissions to be zero (0).

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

0.001265057

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

13,871,345.78

Metric denominator

unit total revenue

Metric denominator: Unit total

10,965,000,000

Scope 2 figure used

Location-based

% change from previous year

3.99

Direction of change

Increased

Reason(s) for change

Acquisitions
Change in methodology
Change in boundary

Please explain

Williams acquired Trace Midstream in April 2022 and NorTex Midstream in August 2022. Although we did not own these assets the full year, Williams included the entire RY2022 GHG emissions from these assets in our GHG reporting. Williams did not have revenue generated from these assets until after their respective acquisition was closed.

This increase in emissions per revenue is skewed by the accounting of emissions and revenues differently. By using a more comparable metric of Scope 1 and 2 emissions divided by throughput, Williams continues to show a downward rate of change for its activities.

Williams also updated our Scope 1 emissions calculation methodology to incorporate AP-42 methane slip emission factors for reciprocating engines.

Additionally, in 2022, Williams altered our boundary and began including offshore blowdowns and other large release events in our Scope 1 emissions data. We also began including corporate buildings and liquid pump stations in our Scope 2 emissions.

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)

Million cubic feet of natural gas

Metric tons CO₂e from hydrocarbon category per unit specified

0.83

% change from previous year

3

Direction of change

Decreased

Reason for change

Williams purchased lower CO₂e intensity Trace assets in 2022 in the Haynesville Basin. Lower CO₂e emissions from existing natural gas processing plants also resulted from improved, metered fuel reporting. Reduced methane emissions were also achieved for equipment leaks in Transmission, blowdowns in Transmission and Gathering and Boosting and centrifugal compressors in Natural Gas Processing.

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

Midstream

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

0.614

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

0.03

Details of methodology

Figure 1 = Scope 1 methane emissions in metric tons CH4 divided by throughput of natural gas in million standard cubic feet.

Figure 2 = Scope 1 metric tons CH4 divided by throughput of hydrocarbons in metric tons.

Throughput is for the gathering and boosting, natural gas processing and transmission and storage segments combined. Methane molecules could be processed or moved multiple times among the three segments and multiple counting is not accounted for in this metric.

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	9,854,032.97	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	2,234,470.42	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	5,106.18	IPCC Fourth Assessment Report (AR4 - 100 year)

C-OG7.1b

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

Emissions category

Combustion (excluding flaring)

Value chain

Midstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

8,526,994.48

Gross Scope 1 methane emissions (metric tons CH4)

38,821.08

Total gross Scope 1 emissions (metric tons CO2e)

9,502,265.07

Comment

Emissions are calculated using the U.S. Environmental Protection Agency Greenhouse Gas Reporting Program and ONE Future methodologies.

Emissions category

Flaring

Value chain

Midstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

297,544.92

Gross Scope 1 methane emissions (metric tons CH4)

1,367.03

Total gross Scope 1 emissions (metric tons CO2e)

331,983.06

Comment

Emissions are calculated using the U.S. Environmental Protection Agency Greenhouse Gas Reporting Program and ONE Future methodologies.

Emissions category

Venting

Value chain

Midstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

1,028,817.22

Gross Scope 1 methane emissions (metric tons CH4)

41,464.19

Total gross Scope 1 emissions (metric tons CO2e)

2,065,521.22

Comment

Emissions are calculated using the U.S. Environmental Protection Agency Greenhouse Gas Reporting Program and ONE Future methodologies. Emissions previously captured in the process emissions category are included in venting emissions to align with the U.S. Environmental Protection Agency Greenhouse Gas Reporting Program source descriptions.

Emissions category

Fugitives

Value chain

Midstream

Product

Gas

Gross Scope 1 CO2 emissions (metric tons CO2)

250.97

Gross Scope 1 methane emissions (metric tons CH4)

7,742.76

Total gross Scope 1 emissions (metric tons CO2e)

193,819.88

Comment

Emissions are calculated using the U.S. Environmental Protection Agency Greenhouse Gas Reporting Program and ONE Future methodologies.

Emissions category

Combustion (excluding flaring)

Value chain

Midstream

Product

Oil

Gross Scope 1 CO2 emissions (metric tons CO2)

425.38

Gross Scope 1 methane emissions (metric tons CH4)

0.02

Total gross Scope 1 emissions (metric tons CO2e)

426.84

Comment

Emissions are calculated using the U.S. Environmental Protection Agency Greenhouse Gas Reporting Program and ONE Future methodologies.

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)
North America	12,094,016.07

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Gathering and Boosting	4,518,437
Processing	3,501,190
Transmission and Storage	4,074,390

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 CO ₂ e	Comment
Oil and gas production activities (upstream)	0	
Oil and gas production activities (midstream)	12,094,016.07	All Scope 1 emissions are midstream
Oil and gas production activities (downstream)	0	

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 CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
North America	1,777,329.71	

C7.6

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

By activity

C7.6c

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

Activity	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Electric Power for Gathering, Transmission and Processing Assets	1,777,329.71	

C7.7

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

No

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

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

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Oil and gas production activities (upstream)	0		
Oil and gas production activities (midstream)	1,777,329.71		All Scope 2 emissions are midstream.
Oil and gas production activities (downstream)	0		

C7.9

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

Increased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0.014	Decreased	0	Increased renewable energy consumption in 2022 to reduce emissions by 0.014 metric tons CO2e. $(0.014 / 11,968,077) * 100\% = 0.00\%$
Other emissions reduction activities	235,650	Decreased	1.97	Methane emissions reductions described in our response to Question 4.3b resulted in a decrease in methane emissions of 235,650 metric tons CO2e in 2022. These emissions reductions resulted from our company-wide Methane Reduction Annual

				<p>Incentive Program (229,450 metric tons CO₂e), plus the replacement of four reciprocating engines with one turbine at our Ranglely Compressor Station on our Northwest Pipeline (6,200 metric tons CO₂e). $[-(229,450 + 6,200) / 11,968,077] * 100\% = -1.97\%$</p>
Divestment	0	No change	0	Williams had no divestitures that changed GHG emissions in 2022.
Acquisitions	269,915	Increased	2.26	<p>In April 2022, we acquired the Haynesville gathering and processing assets of Trace Midstream, a portfolio company of Quantum Energy Partners. This transaction expands our gathering capacity in the large and efficient Haynesville basin of east Texas from 1.8 Bcf/d to over 4.0 Bcf/d. As part of the transaction, Williams committed to an agreement with Rockcliff Energy that connects sustainable NextGen Gas gathered in the Haynesville basin to key markets along our Transco pipeline and growing LNG export demand. Assets purchased from Trace included four compressor stations, five dehydration stations, and four amine treating facilities. We also acquired NorTex Midstream in August 2022, which added 80 miles of natural gas transmission pipelines, 36 Bcf of natural gas storage, one processing plant, and two transmission compressor stations to Williams' footprint. This acquisition enhances our core natural gas strategy and supports the viability of intermittent renewables like solar and wind. $(269,915 / 11,968,077) * 100\% = 2.26\%$</p>
Mergers	0	No change	0	Williams had no mergers that changed GHG emissions in 2022.
Change in output	0	No change	0	Williams had no change in output that changed GHG emissions in 2022.

Change in methodology	799,784	Increased	6.68	<p>In accordance with ONE Future's updated (2022) protocol, Scope 1 emissions for 2022 incorporate AP-42 methane slip emission factors for reciprocating engines. This change resulted in an increase of 906,935 metric tons CO₂e. In 2022, we successfully expanded a process to our processing plants that uses operational data from fuel meters to more accurately calculate emissions at these plants. We introduced this process at our gathering compressor stations last year, and in 2022, the expansion further reduced reported emissions by an estimated 107,151 metric tons of CO₂e.</p> <p>$[(906,935 - 107,151) / 11,968,077] * 100\% = 6.68\%$</p>
Change in boundary	134,170	Increased	1.12	<p>In 2022, Williams began including offshore blowdowns and other large release events in our Scope 1 emissions data. We also began including corporate buildings and liquid pump stations in our Scope 2 emissions. These changes resulted in an increase of 134,170 metric tons CO₂e.</p> <p>$(134,170 / 11,968,077) * 100\% = 1.12\%$</p>
Change in physical operating conditions	857,146	Increased	7.16	<p>Increased natural gas throughput at our significantly electrified Oak Grove and Kensington processing plants, as well as multiple gathering compressor stations in our Susquehanna and Ohio River Supply Hubs, resulted in an increase in Scope 2 emissions of 94,764 metric tons CO₂e from purchased electricity. The Leidy South Project in our Transco Princeton Division was placed in service late in 2021 and operated a full year in 2022. Therefore, Scope 1 combustion emissions were higher in 2022 compared to 2021 along the Project</p>

				<p>contract paths, with an increase in emissions of 315,000 metric tons CO2e in 2022. In our Transco Atlanta Division, Scope 1 combustion emissions increased to manage bi-direction flow and to increase line-pack, with a resulting increase of 237,000 metric tons CO2e in 2022. In our Natural Gas Processing operations, combustion emissions increased in 2022 by 80,773 metric tons CO2e from increased gas throughput. Overall, in 2022, Williams experienced a 26.8% increase in volume of natural gas handled in Natural Gas Processing, a 13.9% increase in volume of natural gas handled in Gathering and Boosting, and a 2.1 % increase in Transmissions and Storage. Increase of 129,609 metric tons CO2e emissions from amine units and reciprocating compressors at our North DeSoto and Converse Processing plants in Haynesville to treat and compress the additional gathered gas from our newly acquired Trace gathering system. $[(315,000 + 237,000 + 80,773 + 94764 + 129,609) / 11,968,077] * 100\% = 7.16\%$</p>
Unidentified	77,904	Increased	0.65	<p>Unidentified miscellaneous changes in GHG emissions totalled 77,904 metric tons CO2e in 2022. $(77,904 / 11,968,077) * 100\% = 0.65\%$</p>
Other	0	No change	0	Williams had no other changes that changed GHG emissions in 2022.

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)	HHV (higher heating value)	0	46,693,767	46,693,767
Consumption of purchased or acquired electricity		538,367	3,637,319	4,175,686

Consumption of self-generated non-fuel renewable energy		67		67
Total energy consumption		538,434	50,331,087	50,869,520

C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	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

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Oil

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

46,692,082

MWh fuel consumed for self-generation of electricity

583,168

MWh fuel consumed for self-generation of heat

4,534,166

Comment

Natural gas fuel tracked by Williams to report annual emissions to the U.S. Environmental Protection Agency Greenhouse Gas Reporting Program and to ONE Future is reported here.

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

Heating value

HHV

Total fuel MWh consumed by the organization

1,686

MWh fuel consumed for self-generation of electricity

1,677

MWh fuel consumed for self-generation of heat

3

Comment

Diesel fuel tracked by Williams to report annual emissions to the U.S. Environmental Protection Agency Greenhouse Gas Reporting Program and to ONE Future is reported here.

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

46,693,767

MWh fuel consumed for self-generation of electricity

584,845

MWh fuel consumed for self-generation of heat

4,534,169

Comment

Total fuel tracked by Williams to report annual emissions to the U.S. Environmental Protection Agency Greenhouse Gas Reporting Program and to ONE Future is reported here.

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	67	67	67	67
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

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)

4,175,686

Consumption of self-generated electricity (MWh)

67

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

0

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

0

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

4,175,753

C9. Additional metrics

C9.1

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

Description

Other, please specify

ONE Future methane intensity, percent gathering and boosting

Metric value

0.05

Metric numerator

Mass of methane emitted

Metric denominator (intensity metric only)

Mass of methane throughput

% change from previous year

9.8

Direction of change

Decreased

Please explain

This figure represents methane intensity, calculated as mass of methane emitted/mass of methane throughout, for the gathering and boosting segment of our operations. In 2022, for the fifth consecutive year, Williams' methane performance outperformed the intensity goals set by ONE Future for this segment (0.080%).

If we calculate the % change using three decimal places, we accomplished a 9.8% decrease from last year $(0.046 - 0.051) / 0.051 * 100 = -9.8\%$. Gathering and boosting segment methane intensity decreased due to a 13.9% increase in natural gas throughput, mainly coming from our newly acquired Trace gathering system assets in the Haynesville Basin. Methane emissions are comparatively low for these new assets

since compression (and associated fuel combustion requirements) are reduced due to high field gas pressure and modest gathering system distances.

Description

Other, please specify

ONE Future methane intensity, percent processing

Metric value

0.03

Metric numerator

Mass of methane emitted

Metric denominator (intensity metric only)

Mass of methane throughput

% change from previous year

0

Direction of change

No change

Please explain

This figure represents methane intensity, calculated as mass of methane emitted/mass of methane throughout, for the processing segment of our operations. In 2022, for the fifth consecutive year, Williams' methane performance outperformed the intensity goals set by ONE Future for this segment (0.111%).

Description

Other, please specify

ONE Future methane intensity, percent transmission and underground storage

Metric value

0.03

Metric numerator

Mass of methane emitted

Metric denominator (intensity metric only)

Mass of methane throughput

% change from previous year

0

Direction of change

No change

Please explain

This figure represents methane intensity, calculated as mass of methane emitted/mass of methane throughout, for the transmission and storage segment of our operations. In 2022, for the fifth consecutive year, Williams' methane performance outperformed the intensity goals set by ONE Future for this segment (0.301%).

Description

Other, please specify
 Gas flaring

Metric value

156.75

Metric numerator

Thousands of metric tons

Metric denominator (intensity metric only)

% change from previous year

7

Direction of change

Decreased

Please explain

Data represents metric tons of waste gas and pilot gas routed to a flare. The decrease of waste gas flaring is primarily due to the following three reasons, listed in order of significance:

- Decreased waste gas from dehydration from Piceance and Southwest Wyoming G&P.
- Decreased waste gas from acid gas removal from some Processing Plants.
- Better understanding of the quantification of waste gas volume sent to flare.

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	0	0	0	Williams' organization

				boundary for reporting is operational control.
Exploration of new natural gas fields	0	0	0	Williams' organization boundary for reporting is operational control.
Expansion of existing oil fields	0	0	0	Williams' organization boundary for reporting is operational control.
Expansion of existing natural gas fields	0	0	0	Williams' organization boundary for reporting is operational control.

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	<p>Williams' New Energy Ventures group is exploring and supporting emerging technologies, markets and new ways for Williams to advance our clean energy future.</p> <p>Our Carbon Capture, Utilization and Storage (CCUS) Development Program utilizes our core competencies of project execution and safe operations to develop the significant infrastructure required to capture, transport and sequester CO2. Williams already captures CO2 at some of our gas processing and treatment plants, and to participate in the build-out of a CO2 economy, we will be exploring other areas further.</p>

		<p>Williams has established the industry’s first NextGen Gas certification process across all segments of the value chain from production through gathering, processing and transmission. By leveraging block-chain secured technology to track and measure end-to-end emissions, we have developed a comprehensive platform to bring greater trust, transparency and transactability to the certified gas market through the aggregation and reconciliation of multiple sources of data to provide a path-specific methane intensity certification that meets or exceeds industry leading measurement protocols.</p> <p>Our Hydrogen Development Program utilizes our expertise at treating, processing, storing and transporting gas. We are actively working on projects such as producing clean hydrogen from electrolysis with renewable power (green hydrogen) and from NextGen Gas with CCUS (blue hydrogen). We are blending hydrogen into our existing transmission lines. We are developing a pilot project in New Jersey to blend clean hydrogen with natural gas to complement our larger Regional Energy Access Expansion natural gas project. This pilot project plans to incorporate hydrogen on a small scale but will position Williams to demonstrate how we leverage new and existing infrastructure for hydrogen.</p> <p>Williams’ Corporate Venture Capital (CVC) program is an outgrowth of our New Energy Ventures, a business development group focused on commercializing innovative technologies, markets and business models that include clean hydrogen, solar, CCUS and next generation natural gas. Since establishing the CVC, Williams has committed approximately \$50 million to stay on the leading edge of emerging trends and innovations at the forefront of the energy transition. In addition, the company is evaluating over 90 startups for investment consideration.</p>
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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

Other, please specify Methane detection and reduction	Applied research and development	5	8,000	5	Williams is donating technical expertise and equipment to various research organizations to further enhance methane detection technologies. Williams is a partner of Methane Emissions Technology Evaluation Center (METEC), a methane detection pilot facility that is led by Colorado State University and allows new technology providers to test their equipment in a controlled, realistic environment. We also participate in optical gas imaging (OGI) field performance studies to assess the efficacy of OGI in upstream oil and gas applications. The purpose of the field work was to provide a quantitative baseline which can be used to demonstrate equivalency of new leak detection methods with regulatory-approved OGI screening methods. As part of this effort, three camera operators participated in two days of leak simulation and data collection.
Other, please specify Energy efficiency in the oil and gas value chain	Applied research and development	5	4,000	5	Williams is a member of The Gas Machinery Research Council (GMRC). GMRC focuses research on improving the reliability

					of compression and compressor efficiency. Research related to reduced maintenance has the potential to yield less blowdowns and therefore less methane emissions.
Pipeline	Applied research and development	30	539,592	30	<p>Williams is a partner of Pipeline Research Council International (PRCI), funding research projects and providing technical expertise to support research and development in pipeline integrity and mechanical reliability.</p> <p>Williams is also involved in PCRI's Emerging Fuels Institute (EFI). The EFI provides PRCI members the opportunity to execute the research needed to ensure the safe transportation and storage of the next generation of energy, such as hydrogen, renewable natural gas (RNG) and other potential gas and liquid fuel sources that will help meet the world's energy needs while reducing the impact to the environment.</p>
Advanced monitoring techniques	Applied research and development	60	1,000,000	60	Williams became a founding sponsor of the Energy Emissions Modeling and Data Lab (EEMDL) in 2022, which

					<p>is an initiative launched by UT Austin, Colorado State University and Colorado School of Mines with the mission to provide reliable, transparent, science-based and measurement-based GHG assessments of global oil and gas supply chains. The initiative aims to achieve this through three key approaches: developing community models and tools for greenhouse gas emissions assessments; making publicly available timely, high-resolution emissions datasets; and creating educational and training materials to enable widespread use of EEMDL's models and data.</p>
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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 - CDP 2023 Assurance Report for Williams.pdf

Page/ section reference

All

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

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

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Page/ section reference

All

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?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Other, please specify Total methane emissions, million metric tons CO2e	International Standard on Assurance Engagements ISAE 3000 (Revised)	Williams references total methane emissions (sum of Scope 1 and Scope 2) in million metric tons CO2e in question C-OG4.6. Williams completed annual limited assurance of specific greenhouse gas (GHG) emissions data in 2022. Since 2019, Williams has engaged ERM Certification and Verification Services (ERM CVS) to provide third-party verification of the following GHG emissions data: total absolute Scope 1 GHG emissions, total location-based Scope 2 GHG emissions and total Scope 1 and 2 GHG emissions. Since 2021, ERM CVS has also provided verification of Williams' methane emissions data. For Gross direct (Scope 1) GHG emissions in millions of metric tons of CO2-equivalent (CO2e), and Gross location-based energy indirect (Scope 2) GHG emissions, the consolidation approach is operational control.  1

 1 ERM CVS - CDP 2023 Assurance Report for Williams.pdf

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)?

No, but we anticipate being regulated in the next three years

C11.1d

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

Williams is currently evaluating our strategy for complying with carbon pricing systems that we could potentially be regulated by, such as the Inflation Reduction Act Methane Emissions Charge and the Washington State Cap-and-Invest program, anticipated for 2024 and 2023, respectively.

The Inflation Reduction Act (IRA) of 2022, signed into law by President Biden in August 2022, took an approach to energy that included industry-supported provisions on oil and gas leasing, Carbon Capture Storage (CCS) and hydrogen. Williams has evaluated the IRA methane fee, and determined at our current performance, Williams will not be subject to the IRA's methane fee, as our operational emissions are below the threshold for each industrial segment. Williams worked with legislators and industry associations on proposed improvements to the methane fee provision in the IRA.

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

Social cost of carbon

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
Stress test investments

Scope(s) covered

Scope 1

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Static

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

10

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

10

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

Williams has begun piloting an internal carbon price to evaluate projects. The carbon price has been used to evaluate some of our new larger projects or emissions reduction initiatives. It has not been institutionalized as part of a management system yet.

Our goal in implementing an internal carbon price is to make sure we are evaluating projects in a way that is efficient for both emissions reduction and executing capital. The price was used for evaluating vent gas recovery units for compressor blowdowns at new stations. It also was incorporated into our transmission pipeline blowdown emissions reduction standard in 2021 as part of our economic evaluation of different types of

emissions reduction methods. Where applied, the internal carbon price is currently used to evaluate Scope 1 emissions and larger modernization projects.

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect other climate related information at least annually from suppliers

% of suppliers by number

7.5

% total procurement spend (direct and indirect)

5

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

Rationale for the coverage of your engagement

Engaging our supplier base is important in achieving our Climate Commitment, and we do so through a tailored ESG questionnaire that reflects our priorities and objectives.

The purpose of this questionnaire is to educate our suppliers about the ESG topics relevant to Williams, particularly focusing on our climate initiatives and goals and to enable us to better understand the environmental sustainability of our suppliers.

The 7.5% of suppliers by number who received the ESG questionnaire consist of mostly new suppliers. We also selected 16 Tier 1 suppliers to manually send the ESG Questionnaire to, representing 5% of our total procurement spend. In the future, we plan to survey all Tier 1 suppliers, which will reflect 80% of our total procurement spend.

The engagement process involves administering the questionnaire to all new and tier one suppliers. The questionnaire covers a wide range of topics, including their climate change strategies, environmental policies, renewable energy utilization, emission

reduction efforts, and resilience measures to address climate impacts.

As part of this engagement, we require suppliers to acknowledge their commitment to adhering to Williams' Code of Conduct for Suppliers, which includes a commitment to good environmental practices as well as compliance with ethical business practices.

As part of the questionnaire, we inquire about certifications related to climate and sustainability efforts, such as being certified for environmental standards or renewable energy practices. We also seek information about Corporate Social Responsibility programs, focusing on their climate, ethical, and environmental responsibilities.

Furthermore, we emphasize the importance of our suppliers providing training to all leadership roles on climate-related matters and regulatory compliance.

Lastly, we inquire about the presence of a written climate action plan and their approach to assessing infrastructure and operations to reduce exposure to climate change impacts while promoting energy efficiency and greenhouse gas emissions reduction.

By engaging our supplier base through this targeted and detailed questionnaire, we help to foster a more sustainable supply chain as we work together toward a greener future.

Impact of engagement, including measures of success

Since the ESG Questionnaire is a recent initiative, we currently measure success by the percent of suppliers who respond, out of the number of suppliers who were sent the survey. In 2022, the response rate was 99.3%. In the future, once we are able to engage our entire Tier 1 supplier base, we plan to use responses to benchmark supplier performance and develop additional measures of success for our supplier engagement.

Comment

C12.1b

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

Type of engagement & Details of engagement

Collaboration & innovation

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

90

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

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

Williams constantly looks for opportunities to build relationships and develop projects that are mutually beneficial with customers. Our customers often have their own climate commitments, and Williams is proud to partner with them to show how our growth projects and emission reduction program projects can help them achieve their emissions reductions goals. Examples of specific engagement activities include the following:

- Emissions reduction programs (ERPs): The ERPs on Northwest Pipeline and Transco are broad engagements with all shipper customers on these regulated pipelines. The ERP intends to systematically modernize transmission compression to lower NOx emissions, maintain operational reliability and customer service, and invest in cost-effective greenhouse gas emissions reduction technologies.
- NextGen Gas: Our NextGen Gas program aims to deliver end-to-end certified, low-carbon natural gas volumes to our customers seeking to reduce the full value chain emissions of their purchased natural gas. NextGen Gas stands out from the average natural gas being delivered to the end customer by other means and pathways. We work with both upstream and downstream operator customers to develop path-specific methane intensity certifications for utilities, LNG export facilities, and other cleaner energy users.
- Hydrogen and carbon capture and storage (CCS): Williams is strategically engaging with customers to evaluate hydrogen and CCS opportunities. These technologies are advantaged by criteria that also drive which customers and partners we engage. As these technologies continue to advance, the pathway to execute on these opportunities will become clearer.

While many of our engagement efforts are applied broadly to all customers in a distinct grouping, we also have more bespoke engagements with individual customers with shared aspirations or specific needs. The selection of a customer for engagement is driven by criteria such as geographic area, segment of the industry, regulatory status or requirements, existence of emissions reduction goals or business activity. Based on these criteria, in 2022, a conservative estimate of the number of customers engaged in climate-related topics is 90%. Represented by this figure, Williams engages nearly all customers except for especially small customers that have not yet been fully engaged in the conversation.

Impact of engagement, including measures of success

By having more voices as part of the climate debate, we help our customers to have a better understanding of the nuances of the issue, which results in better outcomes. Therefore, the overall impact of our engagement is an increased understanding of climate change. We view any increase in discussion of climate issues in our industry as a general measure of success. Additionally, the value drivers and needs of customers can vary across our business, so we seek to first understand our customers' goals and measures of success. Since each program can have different goals and financial

mechanisms, Williams' measures of success and impacts of engagements will also diverge. For example:

- ERPs: We project that the ERP will reduce Transco and NWP system-wide transmission sector NOx emissions by over 75% and compressor methane emissions by approximately 50% from recent levels. Since Transco and NWP are regulated pipelines, we consider successful engagement as effective communication and support of our ERP plan of action achieving emissions reductions in the modernization projects executed. More information about our Emissions Reduction Program can be found in our 2022 Sustainability Report.
- NextGen Gas: In 2022, Williams entered into an agreement with upstream producer Coterra Energy and downstream utility Dominion Energy Virginia to provide a full value chain, low emission solution. Over the 1-year duration of the project, this pathway is estimated to avoid 120,000 metric tons of CO₂e emissions when compared to the national average methane emissions for the production, gathering and transmission segments. Dual success criteria exist for a successful engagement for NextGen Gas, including evaluating opportunities for Williams and its partners to provide certified, low-emissions gas deliveries to those seeking clean energy and to achieve lower value chain emissions for those participating in the NextGen Gas program.
- Hydrogen and CCS: Williams is participating in 10 separate applications in front of the Department of Energy (DOE), including six hydrogen hub applications. In late 2022, the DOE encouraged all six of the hubs that Williams is supporting to move forward in the application process. We currently consider the ability to discern the future potential of hydrogen and CCS opportunities part of the success criteria for these engagements.

C12.1d

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

We are using readily available technology to pursue immediate methane emissions reduction opportunities, implement work practice improvements and evaluate equipment upgrades on a site-specific basis. We strive to provide the best product to our customers while increasing our transparency and verifiability around quantifying and reducing methane emissions. To guarantee Williams is engaged on all fronts, we have joined several methane-related programs, including the United Nations Environment Programme's (UNEP) Oil and Gas Methane Partnership 2.0 (OGMP 2.0); GTI Project Veritas; the Collaboratory for Advancing Methane Science (CAMS); Colorado State University's Methane Emissions Technology Evaluation Center; UT Austin, Colorado State University and Colorado School of Mines' Energy Emissions Modeling and Data Lab (EEMDL) and the Texas Methane and Flaring Commission. These initiatives bring together diverse stakeholders, including non-profits, industry peers and university researchers, to develop methodologies for quantifying methane emissions intensities, identifying emissions reduction opportunities and better defining responsible natural gas. Joining these initiatives allows us to engage in the growing conversations around the quantification and reduction of methane emissions and evaluate the most recent technologies.

We will expand these opportunities while looking to invest in future clean energy projects and carbon abatement instruments.

Additionally, in 2022, Williams continued working with our customers and technology partners to offer lower-carbon products, including Williams' NextGen Gas. NextGen Gas is the next evolution of responsibly sourced natural gas—gas that has been verified at the production site as meeting specific environmental standards and practices. NextGen Gas is not only responsibly produced, but also gathered, processed, stored and transported to end users with the lowest environmental impact possible. Through Williams' NextGen Gas certification process—an industry first—NextGen Gas is securely tracked and independently certified to verify its emissions profile across the value chain. This program represents the first full value chain methane emissions certification program that will meet or exceed the Quantification, Measurement, Reporting and Verification (QMRV) measurement standards prescribed by the Oil & Gas Methane Partnership, a multi-stakeholder partnership developed by the United Nations, environmental NGOs and the Climate and Clean Air Coalition. It will also meet the upcoming Veritas protocol by research firm GTI Energy which brings together scientists, academics, environmental organizations, certification organizations and industry participants to demonstrate emissions reductions in a consistent, credible and transparent way.

Williams is also working with other value chain partners in hydrogen research. Williams is a key supporter of a new center dedicated to applied hydrogen research at the University of Wyoming School of Energy Resources (SER). Williams is giving \$500,000 over five years to support the center focused on growing a hydrogen industry in Wyoming. Further, as a member of the Clean Hydrogen Future Coalition, Williams is leading the way for clean hydrogen to exist in a low carbon economy and is heavily invested in hydrogen development in Wyoming. In fall of 2021, Williams was a recipient of a grant from the Wyoming Energy Authority as part of the Wyoming Hydrogen Pilot.

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

Complying with regulatory requirements

Description of this climate related requirement

As part of Williams' Code of Conduct for Suppliers and Contractors, suppliers and contractors will comply with all applicable environmental laws and regulations. Suppliers will strive to reduce environmental impact in their operations through efforts such as minimizing greenhouse gas emissions and waste and using resources efficiently.

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

100

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

100

Mechanisms for monitoring compliance with this climate-related requirement

Grievance mechanism/Whistleblowing hotline

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

Other, please specify

Suppliers and contractors who are not in compliance with the Code may be subject to contract termination and/or precluded from future business. To re-establish compliance, the supplier must promptly implement corrective actions.

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, we engage directly with policy makers

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?

Yes

Attach commitment or position statement(s)

Williams' state government and regulatory affairs team engages with policymakers and other government stakeholders at the state and local levels to determine actions relative to our policy and regulatory agenda. Our policy and regulatory agendas and related engagements are influenced by our Climate Commitment (see attached). As part of our Climate Commitment, we have set a near-term goal of a 56% reduction in greenhouse gas emissions by 2030, well in line with the country's recently announced Nationally Determined Contribution target of a 50-52% emissions reduction by 2030 and the Paris

Agreement. For more about our public policy efforts, refer to our Sustainability Report (see attached).

 Climate Commitment _ Williams Companies.pdf

 Williams_2022SustainabilityReport.pdf

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

To integrate consistent environmental, social and governance (ESG) strategy including climate change across the organization, Williams has an ESG Director. Because these responsibilities tie directly to our investor relations, in 2022, the ESG Director began reporting to Williams' Vice President of Investor Relations & ESG. This clear chain of command ensures that our climate-engagement strategy aligns with shareholder considerations and is incorporated across the organization. Williams' ESG Director leads the Corporate ESG function, which develops and integrates our sustainability strategy by coordinating with internal stakeholders across the organization.

Williams' growth depends on continued support for energy infrastructure expansion in North America. Government policies at the federal, state and local level affect our existing operations and future project plans. Williams works with government stakeholders and regulatory agencies at the federal, state and local levels on policies that impact our current and future operations. To ensure consistency in our political engagement activities, our Government Affairs and Outreach team oversees our education of policymakers and other government stakeholders on our projects and policy positions. Williams also engages with communities related to natural gas and infrastructure to build relationships, establish win-win scenarios and help continue to grow and provide essential infrastructure.

We have proven experience working with regulators, policymakers and stakeholders to minimize risk in order to build the critical infrastructure needed to fuel our clean energy economy. Our dialogue with shareholders allows us to align with shareholder expectations while creating a uniform response across the company. Members of our executive management team attend investor conferences, conference calls, question and answer sessions and non-deal roadshows. During such meetings, management may discuss Williams' strategy, operations, ESG efforts, financial performance as well as broader energy industry topics and trends. The investor relations team at Williams also shares these same key messages with the financial community throughout the year via phone calls, video calls and email correspondence.

C12.3a

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

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

Inflation Reduction Act

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

Low-carbon products and services

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

Other, please specify

Clean energy technology subsidies and incentives

Policy, law, or regulation geographic coverage

National

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

United States of America

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

Support with minor exceptions

Description of engagement with policy makers

The Inflation Reduction Act (IRA) of 2022, signed into law by President Biden in August 2022, took an approach to energy that included industry-supported provisions on oil and gas leasing, CCS and hydrogen. Williams engaged Congress in 2022 on the industry's permitting reform priorities, but no legislation moved forward despite the deal that was reached. These efforts will continue in 2023.

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

Williams supported a color-blind approach to hydrogen production and advocated for all types of hydrogen to qualify for incentives and support.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

In support of Williams' extensive natural gas infrastructure assets, expansion projects, Climate Commitment and the priorities of our New Energy Ventures (NEV) team, we are focused on leveraging existing technologies while also looking forward and anticipating future innovations and technologies. To that end, Williams supports policies that encourage efficient development of energy infrastructure along with technologies that are aligned with the company's future priorities.

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

Federal policymaker consideration of jurisdictional issues and other considerations related to transporting hydrogen via pipeline.

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

Low-carbon products and services

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

Other, please specify
Hydrogen

Policy, law, or regulation geographic coverage

National

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

United States of America

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

Support with no exceptions

Description of engagement with policy makers

We provided testimony to the U.S. Senate Committee on Energy and Natural Resources explaining the opportunities and challenges of using clean hydrogen to further decarbonize energy production and consumption.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

As part of our climate transition plan and New Energy Ventures program, Williams promotes the allowance of using cutting-edge technologies. Historical policies, laws and regulations have been prescriptive and did not allow the industry to advance with science around emission detection and reduction. By engaging in this policy area and others, Williams is working to create reasonable regulation to help us take action in the direction of our climate strategy.

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

Bipartisan Infrastructure Law

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

Low-carbon products and services

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

Other, please specify
Clean Energy & Pipeline Safety Funding

Policy, law, or regulation geographic coverage

National

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

United States of America

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

Support with minor exceptions

Description of engagement with policy makers

Direct engagement by Williams through comment letters and in-person meetings with policymakers, as well as engagements through coalitions of which Williams is a part.

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

Williams met with policymakers to advocate for provisions and funding in the Bipartisan Infrastructure Law (BIL) related to: hydrogen research, development and deployment; carbon capture, storage and utilization; and, PHMSA modernization. The final version signed into law incorporated many of these industry-supported provisions. Williams would have preferred to see a stronger focus on natural gas infrastructure and permitting reform in the BIL, but we strongly supported many of the provisions in the final version of this legislation signed by the President.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

As part of our climate transition plan and New Energy Ventures program, Williams promotes the allowance of using cutting-edge technologies. Historical policies, laws and regulations have been prescriptive and did not allow the industry to advance with science around emission detection and reduction. By engaging in this policy area and others, Williams is working to create reasonable regulation to help us take action in the direction of our climate strategy.

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

Federal Energy Regulatory Commission Draft Policy Statements on Pipeline Certification and Greenhouse Gas Emissions

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

Climate change mitigation

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

Other, please specify
Energy Reliability

Policy, law, or regulation geographic coverage

National

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

United States of America

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

Support with minor exceptions

Description of engagement with policy makers

In 2022, we engaged on various ESG issues, including energy reliability and justice, environmental justice, cybersecurity preparedness and GHG emissions reductions. For example, Williams collaborated directly with FERC, Congress and industry associations to convey industry feedback to FERC's proposed updates to its 1999 Policy Statement on the Certification of New Interstate Natural Gas Facilities.

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

In response to FERC's request for input from industry, Williams provided our recommendations related to: the Commission's authority to regulate GHG emissions; quantifying project GHG emissions; and, potential mitigation approaches. We have had concerns that FERC's proposed policy changes could result in greater regulatory uncertainty related to the permitting and construction of natural gas infrastructure. Williams shared those concerns with the Commission, and, as a result of our efforts and those of other stakeholders, in March 2022, FERC shifted these policies to "draft" status and reinstated the 1999 policy.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

As part of our climate transition plan and New Energy Ventures program, Williams promotes the allowance of using cutting-edge technologies. Historical policies, laws and regulations have been prescriptive and did not allow the industry to advance with science around emission detection and reduction. By engaging in this policy area and others, Williams is working to create reasonable regulation to help us take action in the direction of our climate strategy.

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

Interstate Natural Gas Association of America (INGAA)

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?

Yes, and they have changed 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

Protecting and improving the environment is a top priority for natural gas and pipeline companies. INGAA's members deliver clean, abundant and affordable natural gas throughout North America. INGAA has announced a set of climate change commitments that outline in detail its mission to help address climate change, including working together as an industry towards reaching net-zero greenhouse gas (GHG) emissions from natural gas transmission and storage by 2050. INGAA's climate commitments include member companies reducing individual GHG emissions from natural gas transmission and storage operations; providing consistent and transparent data collection, measurement and reporting of GHG emissions from operations; and reducing the carbon intensity of natural gas infrastructure by adopting and investing in more innovative technologies.

Williams, as the first North American midstream company with its own Climate Commitment, has encouraged INGAA to adopt its own robust climate and environmental justice positions. We also worked with INGAA on its methane fee positioning, encouraging an industry-wide and strong methane controls. Williams is a signatory of INGAA's Methane Emissions Commitment to implement methane reduction activities and perform leak surveys at all transmission and storage compressor stations by 2022. Williams met this commitment by surveying all our transmission and storage compressor stations and continues to pursue opportunities to reduce our methane emissions.

In 2022, our Executive Vice President of Corporate Strategic Development was appointed as the chair of INGAA for a one-year term, and seven of Williams leaders were also selected to serve as chairs of INGAA's board committees during his term.

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

203,000

Describe the aim of your organization's funding

INGAA is a trade organization that advocates regulatory and legislative positions of importance to the natural gas pipeline industry in North America. Williams' funding to INGAA supports this overall mission.

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

Yes, we have evaluated, and it is aligned

Trade association

Business Roundtable

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

Business Roundtable believes corporations should lead by example, support sound public policies and drive the innovation needed to address climate change. Business Roundtable states that the United States should adopt a more comprehensive, coordinated and market-based approach to reduce emissions that is pursued in a manner that ensures environmental effectiveness while fostering innovation, maintaining U.S. competitiveness, maximizing compliance flexibility and minimizing costs to business and society. Business Roundtable supports the following policy actions to address the climate challenge: invest in technology, drive energy efficiency, develop and deploy resiliency and adaptation measures and invest in energy infrastructure and improve permitting processes. Williams' CEO is a member of Business Roundtable.

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

100,000

Describe the aim of your organization's funding

As stated on BRT's website, its members develop and advocate directly for policies to promote a thriving U.S. economy and expanded opportunity for all Americans. Williams' funding to BRT supports this mission with a focus on their energy policy engagement.

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

Yes, we have evaluated, and it is aligned

Trade association

American Petroleum Institute

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 Petroleum Institute (API) represents all segments of America's natural gas and oil industry, which supports more than 11 million U.S. jobs and is backed by a growing grassroots movement of millions of Americans. Its nearly 600 members produce, process and distribute the majority of the nation's energy and participate in API Energy Excellence®, which is accelerating environmental and safety progress by fostering new technologies and transparent reporting. API was formed in 1919 as a standards-setting organization and has developed more than 800 standards to enhance operational and environmental safety, efficiency and sustainability.

API speaks for the oil and natural gas industry to the public, Congress and the Executive Branch, state governments and the media. It negotiates with regulatory agencies, represents the industry in legal proceedings, participates in coalitions and works in partnership with other associations to achieve its members' public policy goals.

Williams' CEO serves on the board of the American Petroleum Institute.

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

60,146

Describe the aim of your organization's funding

API's mission is to promote safety across the industry globally and to influence public policy in support of a strong, viable U.S. oil and natural gas industry. Williams' funding to API supports this mission with a focus on their efforts related to natural gas.

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

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Clean Hydrogen Future Coalition

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

The Clean Hydrogen Future Coalition (CHFC) was founded to bring together a diverse group of stakeholders to promote clean hydrogen as a critical pathway to achieve global decarbonization objectives while also increasing U.S. global competitiveness. With over 20 leading stakeholder and industry participants, the Clean Hydrogen Future Coalition represents a diverse group of energy companies, labor unions, utilities, NGOs, equipment suppliers and project developers who are committed to the advancement of a net zero CO2 economy that is supported by infrastructure across the supply chain to fully scale clean hydrogen production and use in the U.S. Williams' Vice President of New Energy Ventures is a founding board member of the Clean Hydrogen Future Coalition.

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

20,000

Describe the aim of your organization's funding

Our funding is aimed at providing Williams a seat at the table with the coalition, focusing on developing policy that supports the development of a clean hydrogen economy and creating favorable outcomes for our business.

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

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Coalition for Renewable Natural Gas

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

The Coalition for Renewable Natural Gas provides policy advocacy and education platform to help ensure sustainability and growth for renewable natural gas (RNG) and to improve recognition of the renewable natural gas process (methane mitigation) as a critical part of the solution to global climate change. The Coalition for Renewable Natural Gas is a non-profit organization dedicated to the sustainable advancement of RNG as a clean, green, alternative and domestic energy resource - and as a key component and partial solution to addressing global climate change. The Coalition for Renewable Natural Gas advocates and educates for sustainable development, deployment and utilization of renewable natural gas so that present and future generations will have access to domestic, renewable, clean fuel and energy. The Coalition for Renewable Natural Gas' Sustainable Methane Abatement & Recycling Timeline (SMART) is an initiative to capture and control methane from 43,000+ organic waste sites in North America by 2050, achieving significant benchmarks by 2025, 2030 and 2040. Williams is a member of the Coalition for Renewable Natural Gas' Leadership Advisory Board.

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

12,000

Describe the aim of your organization's funding

Our funding is aimed at providing Williams a seat at the table with the coalition, focusing on developing policy that supports the development of RNG incentives and the development of the RNG market.

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

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Differentiating Gas Coordinating Council

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

The Differentiated Gas Coordinating Council (DGCC) is a coalition of stakeholders across the natural gas supply chain dedicated to facilitating a pathway for policymakers, regulators, utilities and gas consumers to utilize differentiated gas as an important option to meet their climate goals.

We believe that adopting differentiated gas is the best way to rapidly reduce methane emissions in the oil and gas sector—a win for U.S. energy producers, energy consumers and the climate.

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

30,000

Describe the aim of your organization's funding

Our funding is aimed at providing Williams a seat at the table with the council, focusing on developing policy that supports the development of incentives and regulation for differentiated/NextGen Gas products.

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

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Partnership to Address Global Emissions

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

The Partnership to Address Global Emissions (PAGE) is a nonpartisan coalition of like-minded organizations dedicated to promoting U.S. policies, like permitting reform, that protect the climate through the production of natural gas. PAGE believes that increased infrastructure, like pipelines and export terminals, will rapidly increase LNG supply to replace foreign coal, thereby protecting the climate, strengthening the economy,

lowering energy costs and bolstering energy security. Williams' CEO is a member of the PAGE coalition and Williams itself is classified as a Founding Member.

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

1,250,000

Describe the aim of your organization's funding

Our funding is the membership dues level for Founding Member. Being a PAGE Founding Member is aligned with Williams' vision to provide the best natural gas transport, storage and delivery solutions - providing reliable, low-cost, low-carbon energy to meet world demands.

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

Yes, we have evaluated, and it is aligned

C12.4

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

Publication

In mainstream reports

Status

Complete

Attach the document

 Williams-2022-Annual-Report-(bookmarked-final).pdf

Page/Section reference

PDF pages 2, 19, 27, 32-33, 37-40

Content elements

Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

 Williams_2022SustainabilityReport.pdf

Page/Section reference

PDF pages 13-15, 20-25, 30-40, 98-100

Content elements

- Governance
- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics

Comment

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	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Task Force on Climate-related Financial Disclosures (TCFD) Task Force on Nature-related Financial Disclosures (TNFD) Other, please specify OGMP 2.0, EEMDL, GTI Veritas, One Future	<p>TCFD Williams' annual Sustainability Reports are published with references to TCFD recommendations. Additionally, Williams publishes annual standalone TCFD indices to demonstrate that we are taking action to build a more resilient financial system through climate-related disclosure.</p> <p>TNFD The TNFD Forum is a global multi-disciplinary consultative group of institutions. Membership of the Forum is open to a broad range of institutional types including corporates, financial institutions, public sector institutions including regulators, pension funds and sovereign wealth funds, academic and research organisations, business associations, inter-governmental organisations, as well as conservation and civil society organisations. Williams is one of over</p>

		<p>1,100 institutions with membership to the Forum.</p> <p>Oil and Gas Methane Partnership 2.0 (OGMP 2.0) OGMP 2.0 is UNEP’s flagship oil and gas reporting and mitigation program. It is the only comprehensive, measurement-based international reporting framework for the sector. In the past two years, nearly 100 companies with operations in more than 60 countries have joined the initiative. In early 2023, Williams became the first U.S. large-scale midstream company to join OGMP 2.0. OGMP 2.0 member companies strive to report methane emissions in accordance with what are widely recognized as the highest established standards while setting industry-leading methane reduction targets. Joining OGMP 2.0 supports Williams’ next generation natural gas (NextGen Gas) strategy to drive transparency and decarbonization of the natural gas value chain through technology investments, providing path-specific methane intensity certifications to utilities, LNG export facilities and other clean energy users.</p> <p>Energy Emissions Modelling and Data Lab (EEMDL) EEMDL is a collaborative initiative involving the University of Texas at Austin, Colorado State University and the Colorado School of Mines to provide science-based greenhouse gas emissions assessments of global oil and gas supply chains. The \$50 million initiative, sponsored primarily by oil and gas companies, will address the growing need for accurate, timely and transparent accounting of greenhouse gas emissions across global oil and natural gas supply chains. Data and analysis from this new endeavor will help both public and private institutions develop climate strategies and actions informed by accurate data, identifying both opportunities for emissions reductions and verification. Several major energy companies that are also focusing on the accuracy of emissions data are partnering with the new lab, including Williams. Each company will contribute \$5 million over five years to the initiative, with more stakeholders from the oil and gas industry, financial sector and non-governmental organizations expected to join in the near future.</p> <p>GTI Veritas Veritas, GTI Energy’s Methane Emissions Measurement and Verification Initiative, is meeting the urgent need for credible, comparable methane emissions measurement and accelerating actions that reduce methane emissions reductions. GTI’s Veritas initiative brings together scientists, academics, environmental organizations, certification organization and companies to develop accurate and verified methane emissions intensities and the necessary protocols to calculate measurement-informed methane</p>
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		<p>emissions for natural gas systems. The Vertias initiative is one way Williams is pursuing measurable reductions of methane emissions as part of our commitment to a clean energy future.</p> <p>One Future ONE Future was formed when eight companies came together in 2014 with a focus to collectively achieve a science-based average rate of methane emissions across our facilities equivalent to one percent (or less) of total natural gas production. Since its formation, it has grown to 17 companies accounting for the some of the largest natural gas producers, transmission and distribution companies in the U.S. ONE Future member companies represent the entire natural gas value chain and account for approximately 10% of the total natural gas production, 40% of the U.S. natural gas transmission miles and 9% of the U.S. natural gas distribution. ONE Future companies work with each other to promote best practices and share learnings on each company’s respective science-based, technology and methods for methane reduction; though each member always has the flexibility to deploy its capital where it will be most effective. Williams’ partnership with ONE Future and the other member companies demonstrates our ongoing commitment to environmental responsibility.</p>
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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, both board-level oversight and executive management-level responsibility	Williams strives to preserve the environment for future generations by avoiding, minimizing and mitigating potential impacts on biodiversity and land use during routing, siting and construction. Construction and operation activities that could affect biodiversity are performed at or above regulatory standards. The Environmental, Health and Safety (EHS) Committee of the BOD has oversight responsibilities regarding the Company’s management of environmental, health and safety matters, including compliance with applicable laws and regulations. The EHS Committee reviews, monitors and reports

		<p>to the BOD on the performance and activities on EHS matters and provides oversight to the company’s environmental practices to ensure compliance with applicable legal and regulatory requirements.</p> <p>Additionally, the Governance and Sustainability Committee of the BOD oversees the formulation of Williams’ ESG strategy and policies, which may include issues pertaining to biodiversity.</p>
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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, but we 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

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

Biodiversity indicators for site-based impacts

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Williams’ potential to affect biodiversity mainly occurs during the construction of our pipelines. In the early stages of project development, we conduct geographic information system (GIS) analyses, computer-based reviews and site-specific surveys to pinpoint sensitive environmental, cultural and historic areas. Our preliminary project analysis seeks to identify and protect areas of High Conservation Value (HCVs) from the impacts of construction and land use changes. We pay special attention to streams and wetlands; rare, threatened or endangered species; historic properties; and culturally important sites, including those important to indigenous peoples.

We also seek to understand interconnections (or interdependencies) between natural resources and local communities. This contextual information is valuable for decision

making and long-term success of potential mitigation and stewardship efforts. We use the outputs of the GIS analyses, combined with stakeholder feedback, to proactively develop avoidance, minimization or mitigation strategies that address any potential adverse effects from construction and operations.

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?

Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify
U.S. Fish and Wildlife Service

Country/area

United States of America

Name of the biodiversity-sensitive area

DeBeque phacelia (plant) critical habitat

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Operation of one existing compressor station facility with a footprint of 0.4 hectares

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

No

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Williams' biodiversity practices are governed by company-driven policies and local, state and federal regulations. Our approach to protecting the health of our local ecosystems

reflects key principles of the International Finance Corporation's environmental and social sustainability performance standards. We apply the adaptive mitigation hierarchy to "avoid, minimize, restore and offset" potential impacts on sensitive land and aquatic ecosystems during project development and execution.

Williams' potential to affect biodiversity mainly occurs during the construction of our pipelines. In the early stages of project development, we conduct geographic information system (GIS) analyses, computer-based reviews and site-specific surveys to pinpoint sensitive environmental, cultural and historic areas. Our preliminary project analysis seeks to identify and protect areas of High Conservation Value (HCV) from the impacts of construction and prevent land use changes of natural habitats. We pay special attention to streams and wetlands; rare, threatened or endangered species; historic properties; and culturally important sites.

We also seek to understand interconnections between natural resources and local communities. This contextual information is valuable for decision making and long-term success of restoration and stewardship efforts. We use the outputs of the GIS analyses, combined with stakeholder feedback, to proactively develop natural resource management strategies that address any potential adverse effects from construction and operations.

Sustainable development of new projects involves responsibly managing natural resources and preserving ecosystem services in the process. When feasible, we design projects that use or run parallel to existing rights-of-way to minimize habitat fragmentation and avoid areas with high biodiversity. We develop and execute new projects in compliance with all applicable regulations.

Williams works closely with state and federal agencies to minimize impacts if we cannot avoid sensitive biodiversity areas by rerouting projects during the design phase. We also collaborate with interest groups, biodiversity and land mapping experts, community organizations and land management agencies to develop appropriate impact minimization, restoration and offset plans. Standard minimization measures include seasonal restrictions, reducing construction footprints and implementing specialized construction methods.

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify
U.S. Fish and Wildlife Service

Country/area

United States of America

Name of the biodiversity-sensitive area

Gunnison sage-grouse critical habitat

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Operation of 16 existing aboveground facilities: 6 valve sites and 10 meter stations with combined footprint of 0.17 hectares.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Williams facilities located within the critical habitat are limited to stationary valve and meter sites, which have small individual footprints, generate minimal noise, and involve little to no associated operational activity. More than half of these meter stations are equipped with measurement communication, reducing personnel visits to the site for purposes of data collection.

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify
U.S. Fish and Wildlife Service

Country/area

United States of America

Name of the biodiversity-sensitive area

Northern spotted owl critical habitat

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Operation of three existing aboveground facilities: meter site, valve site and communications facility with combined footprint of 0.08 hectares.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Williams facilities located within the critical habitat are limited to stationary valve and meter sites, which have small individual footprints, generate minimal noise, and involve little to no associated operational activity.

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify
U.S. Fish and Wildlife Service

Country/area

United States of America

Name of the biodiversity-sensitive area

Loggerhead sea turtle critical habitat

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Existing offshore oil and gas platforms within the critical habitat.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Existing offshore oil and gas platforms are located within Loggerhead Sea Turtle critical habitat, within the Sargassum seaweed fields which serve as feeding grounds. Most of these facilities were constructed prior to the date of critical habitat designation in 2014. Relevant ongoing activities associated with Offshore Platforms are limited to artificial lighting and occasional marine vessel traffic. Artificial lighting from facilities located closest to the shore could potentially disorient newly hatching sea turtles.

Oil and gas platform structures can also add value to biodiversity as artificial reef ecosystems, supporting a complex food chain. According to the National Oceanic and Atmospheric Administration (NOAA), "Plants and invertebrates attach to petroleum platforms only weeks after the platforms are placed in the marine environment. Within a year, the platform can be completely covered with plants and sessile (stationary)

invertebrates. The attached plant life and stationary invertebrates attract mobile invertebrates and fish species, and thus form a highly complex food chain."

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 protection Land/water management Species management Education & awareness

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	Yes, we use indicators	State and benefit indicators Response indicators Other, please specify species diversity, survivability, percent cover, stabilization / topography

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	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity	Pages 42-44  3
Other, please specify Company policy	Content of biodiversity-related policies or commitments	 1

	Governance Biodiversity strategy	
Other, please specify Company webpage	Content of biodiversity-related policies or commitments Biodiversity strategy Other, please specify stakeholder engagement	 ²

 ¹EHS Policy.pdf

 ²Biodiversity webpage.pdf

 ³Williams_2022SustainabilityReport.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	Chief Executive Officer (CEO)	Chief Executive Officer (CEO)

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