OGMP 2.0 REASSESSMENT REPORT

JULY 2025

TC Energy

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EXECUTIVE SUMMARY

Each tonne of carbon dioxide equivalent (CO_2e) that is avoided, reduced or removed from the atmosphere plays a role in addressing the immense and complex challenge of climate change. TC Energy recognizes the importance of managing our emissions as we safely and efficiently move, generate and store the critical energy that North America and the world rely on. More broadly, we believe our infrastructure and the natural gas industry play a critical role facilitating access to reliable and affordable energy, while supporting global emission reduction efforts by displacing higher emitting sources of energy in regions where coal and fuel oil remain a dominant energy source.

To enhance market confidence in these efforts, it is important to build a strong foundation of accuracy and reliability in GHG emissions data. We have made considerable progress maturing our GHG emissions data management and strive to improve the quality and transparency of our data, including methane emissions data and disclosures. As part of this effort, we conducted a reassessment into the merits of joining the Oil and Gas Methane Partnership 2.0 (OGMP 2.0). A group of dedicated subject matter experts supported this reassessment work, leveraging internal and external expertise. This work has been endorsed at the executive level, with Board oversight, and cross-functional support throughout the organization.

As a result of this reassessment, we have decided not to join OGMP 2.0 at this time. Regulatory misalignment and uncertainty present considerable challenges to reach and maintain OGMP 2.0 gold standard across all three operating jurisdictions within the expected timelines.

However, the process facilitated an in-depth review of our current methane emissions measurement and quantification practices and highlighted several key areas of strength:

- Strong alignment between TC Energy and OGMP 2.0 principles that promote accuracy and transparency of methane emissions data to better inform decision making and drive real-world reductions
- An established foundation of existing methane emissions measurement and quantification practices that create opportunities to drive best practice across our operating jurisdictions
- Improved understanding and confidence in our methane emissions data to establish a target to reduce methane intensity 40 - 55 per cent below 2019 levels by 2035 [2].

Through these actions, and our commitment to continuous improvement, we strive to address the risks associated with reporting methane emissions while appropriately balancing the ability to maintain commercial competitiveness and achieve our strategic objectives. As we advance our methane emissions management efforts, our goal is to strike the right balance between protecting and enhancing the value of our assets by managing climate-related risks, maintaining competitive tolls for our customers, and generating strong returns for our shareholders.

TC Energy has reduced absolute methane emissions[1]

12 % between 2019-2024.

We have introduced a target to reduce methane intensity

40–55 %

below 2019 levels by 2035.

In 2024, we introduced a

10 %

weighted methane intensity reduction metric into our three-year-vesting performance share units as part of our long-term incentive for executive compensation.

[1] Methane emissions attributed to Scope 1 emissions

[2] Our target addresses Scope 1 methane emissions associated with our natural gas transmission and gas storage assets, expressed in tonnes of CH_4 per Bcf. For planning purposes, target progress is measured under the operational control reporting boundary, relative to the 2019 baseline year intensity of 10.07 tonnes CH_4/Bcf, which has been recalculated to align with the structural and methodological changes noted in the 2024 TC Energy Report on Sustainability for the 2020 through 2023 reporting periods.

ABOUT THIS REPORT

Over the past year, the company conducted a reassessment of joining OGMP 2.0, building on the previous assessment performed and published in 2023. The project team leveraged internal and external expertise and engaged directly with the *United Nations Environmental Programme* (UNEP); the organization accountable for OGMP 2.0's mandate.

This report provides a detailed summary of our reassessment work, including key findings, conclusions and next steps.

The OGMP 2.0 reassessment involved the following:

- **PERFORMING A REGULATORY AND TECHNICAL GAP ANALYSIS**
- **REFINING COST ESTIMATES**
- **IDENTIFYING COST RECOVERY OPPORTUNITIES AND CONSTRAINTS**

The scope of the assessment includes TC Energy's Scope 1 and Scope 2 emissions from our natural gas pipeline operations in Canada, the U.S. and Mexico. It excludes our power and energy solutions assets, as the associated methane emissions footprint is considered immaterial by OGMP 2.0. The analysis focused solely on field data collection, acceptable quantification, methodologies and reporting of emissions above and beyond jurisdictional regulatory requirements to achieve a level 4 or 5 by OGMP 2.0 standards and is based on information and reports available at the time of this publication.

Methane emissions represent approximately 19 per cent of our overall Scope 1 emissions profile. Fugitive emissions and vented emissions constitute the majority of our emission footprint, with a small portion resulting from combustion methane slip[3]. The facility types largely responsible for these methane emissions are compressor stations, meter stations and, to a lesser extent, pipeline valve sites. Natural gas storage facilities, including storage wells are considered immaterial, contributing less than one per cent of total methane emissions.

[3] Methane slip is defined as unburned methane entrained in the exhaust of natural gas compressor engines.

About OGMP 2.0 reporting levels

The goal of joining OGMP 2.0 is to prioritize increased coverage and direct measurement of methane emissions through the implementation of measurement-informed technology for leak detection and quantification. Upon joining, companies are expected to achieve OGMP 2.0 leak detection and quantification levels 4 and 5 within three years for operated assets and within five years for non-operated assets. Companies are also expected to establish a company-wide methane reduction target that reflects ambitious goals.

OGMP 2.0 REPORTING LEVELS[4]

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
Venture/asset reporting • Single, consolidated emissions number • Only applicable where company has very limited information	**Emissions category** • Emissions reported based on International Association of Oil & Gas Producers and Marcogaz[5] emissions categories • Based on generic emissions factors	**Generic emission source level** • Emissions reported by detailed source type • Based on generic emissions factors	**Specific emission source level** • Emissions reported by detailed source type using specific emissions and activity factors • Based on direct measurement or other methodologies	**Level 4 + site level measurement reconciliation** • Level 5: Integrating bottom-up source-level reporting (L4) with independent site-level measurements • Site-level measurements: direct measurement technologies at a site or facility level on a representative sample of facilities

[4] Source: UN Environment Program; OGMP Partnership
[5] MARCOGAZ is the European Union (EU) reference association of the gas industry for technical assessment in the midstream and downstream gas systems. It is an internationally recognized technical reference to categorize methane emissions and developed the methodology to quantify methane emissions, supporting the implementation of fit for purpose measurement, reporting and verification (MRV) systems in the EU.

KEY FINDINGS

Our analysis focused on determining the extent to which TC Energy's current methane emissions field data collection, quantification, methodologies and reporting would currently achieve an OGMP 2.0 standard level 4 or 5. The table below demonstrates the jurisdictional regulatory requirements that we adhere to across our operations.

The reassessment continues to find that our natural gas pipelines operations have achieved varying levels of methane emissions detection and reporting maturity, reflecting the differences in regulatory requirements across Canada, U.S. and Mexico.

OGMP 2.0 STANDARDS COMPARED TO JURISDICTIONAL REGULATORY REQUIREMENTS

JURISDICTIONS	FEDERALLY-SET METHANE EMISSIONS TARGETS	LEAK DETECTION	LEAK QUANTIFICATION	OGMP	
				L4	L5
OGMP 2.0	Methane absolute or emissions intensity target	• Level 4: representational facility source-level leak detection required • Level 5: representational facility source-level and facility-level leak detection required	Quantification required for level 4 and 5		
CANADA Environment and Climate Change Canada (ECCC)	• **2025 target**: 40-45% methane emissions reductions from 2012 levels • **2030 target**: at least 75% reduction from 2022 levels	• Compressor stations: 3x per year LDAR • Meter stations and valve sites: annually	• Leak quantification required • No top-down/bottom-up reconciliation required	✓	!
U.S. Environmental Protection Agency (EPA)[6, 8]	35% methane emission reduction by 2035 from 2005 levels[7]	• **Subpart OOOOa/b**: 4x per year at compressor stations installed post-September 2015 • **Subpart OOOOc**: 4x per year at all compressor stations regardless of installation date by 2029	• No leak quantification or top-down/bottom-up reconciliation required • Subpart-W: more emphasis on higher-quality emission calculation, but does not explicitly require quantification	!	!
MEXICO Agency for Safety, Energy and the Environment (ASEA)	30% methane emissions reductions by 2030 from 2020 levels	• 2x per year LDAR at all facilities • 1x per year LDAR program evaluation	• Leak quantification required • No top-down/bottom-up reconciliation required	!	!

✓ Meets ! Partially meets ✗ Does not meet

[6] Certain EPA regulations are under reconsideration. The regulations listed are as they currently stand and are subject to change.
[7] In December 2024 the U.S. submitted its nationally determined contribution (NDC) to the Paris Agreement with an economy-wide target to reduce its net GHG emissions 61-66% by 2035 from 2005 levels. While the submission did not set NDC for individual gases, it anticipates reducing methane emissions by 35% from 2005 levels to achieve its 2035 NDC net GHG emissions target. In January 2025 the U.S. signed an order to withdraw from the Paris Agreement which could impact its NDC target. https://unfccc.int/sites/default/files/2024-12/United%20States%202035%20NDC.pdf
[8] Some states have augmented LDAR requirements over and above EPA requirements such as New York, Pennsylvania, Maryland and California.

CANADA: **LEVEL 4**

LDAR Program: All sites (compressor stations, meter stations, valve sites)
Quantification: Yes

The Canadian Natural Gas Pipelines operations' leak detection and quantification practices are assessed at an OGMP 2.0 standard level 4, with additional effort required to achieve level 5 gold standard. Existing regulations require leak quantification on a source-by-source basis. A top-down/bottom-up reconciliation between the facility-level and source-level emissions, as required by OGMP 2.0's level 5, is beyond the current ECCC regulatory requirements. While we continue to find ways to optimize our existing Canadian LDAR program, TC Energy is currently evaluating the scalability of certain emission detection technology pilot projects, such as satellite, aerial patrols and continuous monitoring systems that would allow for facility-source emission reconciliation and position Canadian Natural Gas Pipelines operations to achieve level 5.

MEXICO: **LEVEL 3**

LDAR Program: All large sites (compressor stations, meter stations)
Quantification: Yes

Our Mexico Natural Gas Pipelines operations have been assessed at an OGMP 2.0 standard level 3. Attaining level 4 would require additional focus on quantification methodologies on some vented emission sources and the implementation of a more expansive leak repair program. Data is available to perform these enhanced quantification practices, and as result, our assessment found that the Mexico operations are level 4 ready. To achieve level 5, Mexico operations would need to incorporate the reconciliation of emissions data from top-down surveillance programs.

U.S.: **LEVEL 3**

LDAR Program: Partial (select compressor stations, select meter stations)
Quantification: Partial

U.S. Natural Gas Pipelines operations are assessed at an OGMP 2.0 standard level 3. Existing EPA regulations under Subpart OOOOa/b[9] require leak detection via quarterly optical gas imaging (OGI) surveys of compressor stations installed after 2015 and set out repair provisions for equipment components where a leak has been identified. There is no requirement to quantify emissions. TC Energy's compliance with applicable Federal and State Leak Detection and Repair (LDAR) regulations as prescribed by Subpart OOOOa/b and Subpart W[10], as well as voluntary programs through Interstate Natural Gas Association of America, results in approximately 70 per cent of compressor stations and a subset of lower-emitting facilities, such as city gate[11] meter stations and well sites, being surveyed each year[12].

Existing jurisdictional reporting regulations allow for the use of generic emission factors to calculate emissions. U.S. methane regulations do not prioritize measurement-informed data over emission factors, limiting the availability of measurement-based data from U.S operations. Accordingly, to attain an OGMP level 4, the U.S. LDAR program would have to enhance current OGI surveys of compressor stations to include quantification and increase the number of surveys for meter stations and valve sites to cover a representative sample of facilities. These survey requirements would escalate over the five-year period, potentially reaching approximately 50 per cent of compressor stations and meter stations, and 10 per cent of valve sites.

Additionally, to reach level 5, the U.S. would have to establish a top-down surveillance program, such as satellites, aerial patrols or continuous monitoring systems, to reconcile source emissions at the equipment level.

[9] https://www.ecfr.gov/current/title-40/part-60/subpart-OOOOa
[10] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-98/subpart-W?toc=1
[11] City gate means a point or measuring where custody transfer occurs between a natural gas transmission system pipeline company/operator and a distribution system company/operator.
[12] If Subpart OOOOc is adopted, it would require all compressor stations to be inspected quarterly at a minimum, regardless of installation date, starting in 2029.

OPPORTUNITIES FOR COST RECOVERY

Cost recovery mechanisms for conducting measurement, quantification and remediation activities vary significantly between Canada, the U.S. and Mexico.

A substantial portion of actions taken as part of our LDAR program in our Canadian operations are regulated preventative maintenance activities and are treated as flow through expenditures in our cost-of-service model. In addition to the LDAR program, best practice emissions reduction initiatives are executed as part of our general plant and maintenance capital and expense programs. When capitalized, these initiatives can contribute to the overall rate base where regulated entities earn a return on and of capital.

In the U.S., some of the costs associated with the existing, regulatory-required LDAR program are recoverable through various toll structures, but costs associated with the incremental activities needed to meet voluntary OGMP 2.0 requirements are unlikely to have cost recovery. The recovery of these expenditures would be assessed through a FERC regulated process and highly dependent on input and collaboration with external stakeholders, including shippers. For the LDAR program alone, the incremental cost to achieve OGMP 2.0 gold standard in the U.S., would result in a 1.5x increase compared to status-quo compliance program costs and a 5x increase if the compliance program is removed by the EPA, as currently being proposed.

In Mexico, our pipelines operate under contractual arrangements that currently offer no opportunities for cost flow-through for expenditures related to measurement, quantification, and remediation activities associated with our methane footprint, aside from change-in-law situations.

CONCLUSION & NEXT STEPS

The evolving regulatory framework in the U.S. presents a significant hurdle to achieving and maintaining OGMP 2.0 gold standard level 4 and 5. This includes the pending overhaul of applicable EPA regulations, with planned reconsiderations of Subpart OOOOb/c and Subpart-W. If existing regulations are significantly modified or rescinded, the gap between current practice and OGMP 2.0 level 4/5 would be amplified and create additional risk of under-recovery for voluntary methane reduction initiatives above and beyond regulatory requirements.

Due to regulatory misalignment and uncertainty in the U.S., TC Energy has chosen not to join OGMP 2.0 at this time.

As highlighted in this reassessment, the regulatory framework provides a critical foundation and the basis for alignment with customers as we balance the need to maintain safe and reliable pipeline operations, incentivize efficiency, and incur reasonable costs. We believe that making commitments that outpace regulatory advancements could not only jeopardize our ability to maintain commercial competitiveness of our existing service offering, but our customer's competitiveness as well.

Although we are not joining OGMP 2.0, the merits of this reassessment should not be understated. The reassessment highlighted the strong alignment that currently exists between TC Energy and OGMP 2.0 principles that promote accuracy and transparency of methane emissions data to better inform decision making and drive real-world reductions.

Through the process, we were able to confirm the strength of our existing practices. For instance, in Canada, we now have a measurement informed inventory, reflecting the scale and depth of the Canadian federal and provincial regulatory requirements. Having consolidated our gas businesses under a single leadership structure in 2024, we have also increased opportunities to share best practices between our operating jurisdictions and apply learnings across our system as appropriate.

Building on our solid foundation, we will continue to leverage the OGMP 2.0 framework as appropriate to inform tangible improvements to the transparency, consistency, completeness and reliability of reported methane emissions data across our system. For example, by applying OGMP's technical guidance on selecting a statistically representative sample, we were able to aggregate and analyze emissions data from Canadian emission sources and apply emission factors derived from measurement-informed emissions data to comparable emission sources in other jurisdictions, establishing a defensible foundation for assessing methane emission materiality. Applying these learnings will enable us to further identify and prioritize the most cost-effective abatements while maintaining commercial competitiveness of our service offering.

Finally, the reassessment facilitated an in-depth review of current methane emissions measurement and quantification practices at TC Energy, providing valuable insight and increased confidence in our data to establish a mid-term methane intensity target, marking another important milestone in our methane management efforts. This complements our 10 per cent weighted methane intensity reduction metric in our three-year-vesting performance share units as part of our long-term incentive for executive compensation.

This reassessment report represents a viewpoint anchored in today's regulatory and policy landscape. TC Energy's approach to emissions reductions remains consistent and aligned with our value proposition. We will continue conducting abatement activities at a pace that aligns with our risk tolerance, conforms with applicable regulatory frameworks, garners customer support, and allows for appropriate cost recovery so we can deliver on our financial commitments.

We will continue to monitor regulatory and commercial drivers across our operating jurisdictions and key LNG import regions. Should these drivers signal expected adoption of OGMP 2.0 or comparable best practices in methane emissions management, quantification and reporting, we are well-positioned to meet those expectations.

Moreover, as global energy demands grow while climate imperatives intensify, we believe natural gas and LNG will continue to play a critical role. In alignment with our climate strategy, we strive to position ourselves as a credible and reliable partner in the LNG value chain to further unlock the potential of North American LNG in increasing global access to reliable and affordable energy, supporting economic competitiveness, and contributing to global emission reduction efforts.

WANT TO LEARN MORE?

+ Climate-related disclosures in our Report on Sustainability
+ Roadmap to Reasonable Assurance on GHG Emissions

FORWARD-LOOKING INFORMATION

This document contains certain information that is forward-looking and is subject to important risks and uncertainties (such statements are usually accompanied by words such as “anticipate”, “expect”, “believe”, “may”, “will”, “should”, “estimate”, “intend” or other similar words). Forward-looking statements do not guarantee future performance. Actual events and results could be significantly different because of assumptions, risks or uncertainties related to our business or events that happen after the date of this document. Our forward-looking information in this document includes, but is not limited to expectations on natural gas’ role in facilitating access to reliable and affordable energy and potential displacement of higher emitting sources of energy such as coal and fuel oil, statements on our methane emission management strategy, including mid-term targets related to GHG and methane emissions intensity, statements on our methane emissions detection and reporting maturity, expected developments and costs required to achieve OGMP 2.0 level 4 or 5 compliance, including the use of top-down satellites, aerial patrols and other continuous monitoring systems, expectations on the scalability of our emissions detection technology, expected opportunities for cost recovery, regulatory and policy developments, expected future benefits and learnings from our OGMP 2.0 reassessment, and statements relating to our financial and operational performance, including the performance of our subsidiaries.

Our forward-looking information is based on certain key assumptions and is subject to risks and uncertainties, including but not limited to realization of expected benefits from acquisitions and divestitures, our ability to successfully implement our strategic priorities and whether they will yield the expected benefits, our ability to develop, access or implement some or all of the technology and infrastructure necessary to efficiently and effectively achieve GHG and methane emission targets and ambitions, the commercial viability and scalability of GHG and methane emission reduction strategies and related technology and products, the development and execution of implementing strategies to meet our sustainability commitments, our ability to implement a capital allocation strategy aligned with maximizing shareholder value, the operating performance of our pipeline and power generation and storage assets, amount of capacity sold and rates achieved in our pipeline businesses, the amount of capacity payments and revenues from our power generation assets due to plant availability, production levels within supply basins, construction and completion of capital projects, cost and availability of, and inflationary pressure on, labour, equipment and materials, the availability and market prices of commodities, access to capital markets on competitive terms, interest, tax and foreign exchange rates, performance and credit risk of our counterparties, regulatory decisions and outcomes of legal proceedings, including arbitration and insurance claims, our ability to effectively anticipate and assess changes to government policies and regulations, including those related to the environment, our ability to realize the value of tangible assets and contractual recoveries, competition in the businesses in which we operate, unexpected or unusual weather, acts of civil disobedience, cybersecurity and technological developments, sustainability-related risks, including climate-related risks and the impact of energy transition on our business, economic conditions in North America as well as globally, and global health crises, such as pandemics and epidemics and the unexpected impacts related thereto. In addition, there are risks that the effect of actions taken by us in implementing targets, commitments and ambitions for sustainability may have a negative impact on our existing business, growth plans and future results from operations.

For additional information about the assumptions made, and the risks and uncertainties which could cause actual results to differ from the anticipated results, refer to the most recent Quarterly Report to Shareholders and Annual Report filed under TC Energy’s profile on SEDAR+ and with the U.S. Securities and Exchange Commission. As actual results could vary significantly from the forward-looking information, you should not put undue reliance on forward-looking information and should not use future oriented information or financial outlooks for anything other than their intended purpose. We do not update our forward-looking statements due to new information or future events, unless we are required to by law.

This document may contain statistical data, market research and industry forecasts that were obtained from third party sources, industry publications, and publicly available information. We believe that the market and industry data presented throughout this presentation is accurate and, with respect to data prepared by us or on our behalf, that our estimates and assumptions are reasonable, but there can be no assurance as to the accuracy or completeness thereof. The accuracy and completeness of the market and industry data presented throughout this presentation is not guaranteed and we make no representation as to the accuracy of such information. Although we believe it to be reliable, we have not independently verified any of the data from third-party sources referred to in this presentation or analyzed or verified the underlying studies or surveys relied upon or referred to by such sources, or ascertained the underlying economic and other assumptions relied upon by such sources and we make no representation as to the accuracy of such data. Actual outcomes may vary materially from those forecast in such reports or publications, and the prospect for material variation can be expected to increase as the length of the forecast period increases. Market and industry data is subject to variations and cannot be verified due to limits on the availability and reliability of data inputs, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey.

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