



REPORT ON SUSTAINABILITY

JULY 2024





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INTRODUCTION



This document includes environmental or climate-related content that has been developed with guidance from internationally-recognized methodologies, frameworks, standards and/or recommendations for sustainability reporting. We continue to monitor developments for mandatory climate-related disclosure in jurisdictions where we operate, and will adjust our disclosure and public statements as required to comply with new mandatory requirements. Where non-standard measures are used, we have disclosed the information in accordance with our internal standards, which are designed to reflect and be consistent with internationally-recognized methodologies, frameworks, standards and/or recommendations to the extent possible.

IN THIS SECTION

04 About TC Energy

Our **purpose** is to deliver the energy people need every day, safely, responsibly, collaboratively, and with integrity.

Our **vision** is to be the premier energy infrastructure company in North America today and in the future by safely generating, storing and delivering the energy people need every day.



ABOUT TC ENERGY

Global access to secure and sustainable energy requires innovative thinking and clear strategy. TC Energy is a team of over 7,000 energy problem solvers moving, generating and storing the energy North America relies on. We are willing partners in the collective effort to advance a lower-emission energy system that is affordable, reliable and secure. We work closely with our neighbours, customers, Indigenous peoples and governments across Canada, the U.S. and Mexico to build relationships and create mutually beneficial opportunities.

Strategic focus for Liquids Pipelines

Following a two-year strategic review of our Liquids Pipelines business, we announced in July 2023 the proposed plan to separate TC Energy into two independent, investment-grade, publicly listed companies to maximize the value of our assets, while further integrating our natural gas business to capture synergies. On June 4, 2024, at the Annual and Special Meeting (ASM), our shareholders voted in favour of the spinoff of our Liquids Pipelines business.

The new business will be called South Bow Corporation. South Bow Corporation will assume responsibility for all of our liquids infrastructure when approvals have been received and the transaction is complete, expected in the late third quarter to mid fourth quarter 2024. Until such time, sustainability reporting will continue to rest with TC Energy and include our natural gas, power and energy solutions and liquids business segments.

Sustainability influence on organizational success

We hold ourselves accountable as an organization to the commitments we make, and firmly believe that what gets measured gets done. Starting in 2022, we embedded sustainability goals into our corporate scorecard to progress and advance strategic priorities including growth and energy transition. Our 2023 internal [corporate scorecard](#) included goals on safety, diversity of women and visible minorities in leadership and management of our greenhouse gas (GHG) emissions.

Our overall enterprise approach to sustainability is guided by our nine commitments that align to the United Nations Sustainable Development Goals (UN SDGs), with tangible targets to measure and drive performance in areas including emissions reductions, women in leadership, biodiversity and safety.



Our values

Our corporate values form the foundation of how we do business.



SAFETY



INNOVATION



RESPONSIBILITY



COLLABORATION



INTEGRITY

About our business

With over 70 years of experience, TC Energy is a leader in the responsible development and reliable operation of North American energy infrastructure, including natural gas and liquids pipelines, power generation and natural gas storage facilities.

Land acknowledgment

TC Energy acknowledges the Indigenous ancestral lands on which the company operates across North America and affirms our commitment to understanding how the histories, cultures and rich traditions of the peoples of these lands have been shaped by the past, how they influence our present and what we can learn to prosper together in the future. We are committed to working with the original keepers of the land to advance shared ownership and prosperity.



Portfolio at a glance

TC Energy's asset map demonstrates our company's unique value proposition. We have an unparalleled asset base that spans Canada, the U.S. and Mexico. Our extensive infrastructure provides the energy connections that unite North America.

93,600 KM

(58,100 MILES) OF NATURAL GAS PIPELINES

650 BCF

OF NATURAL GAS STORAGE

WE OWN OR HAVE INTEREST
IN APPROXIMATELY

4,600 MW

OF POWER-GENERATION CAPACITY, OF WHICH

3,170 MW

IS NUCLEAR POWER-GENERATION

4,900 KM

(3,000 MILES) OF LIQUIDS PIPELINES



As of December 31, 2023

- Natural gas pipeline ———
- In development/construction - - - - -
- Liquids pipeline ———
- Regulated natural gas storage (blue circle)
- Liquids tank terminal (green circle)

- Nuclear power generation (nuclear symbol)
- Natural gas power generation (flame symbol)
- Wind power generation (wind turbine symbol)
- Solar power generation (sun symbol)
- Renewable natural gas (flame with leaf symbol)
- Unregulated natural gas storage (grey circle)



Message from the CEO & Board Chair

We are witnessing an unprecedented rise in demand for all forms of energy, from conventional sources to established renewables and new technologies.

This increase is driven by macro trends such as population growth, global economic growth, rising standards of living in developing regions and technological transformation in energy-intensive sectors, like data centers, cryptocurrency and artificial intelligence (AI). The challenges of meeting this growing demand, as we concurrently work to lower greenhouse gas (GHG) emissions and emissions intensity, are compounded by ongoing disruptions in global energy supplies, extreme weather events, and public and government responses to scarcities and soaring energy prices.

The North American energy system TC Energy has built over the past 70 years positions us well to play an ongoing and important role in meeting these challenges.

Our strategic priorities — maximizing asset value, focusing on impeccable project execution and enhancing our balance sheet strength — reinforce our long-term sustainability by unlocking value and generating reliable shareholder returns.

OFFERING SOLUTIONS TO THE ENERGY TRILEMMA

TC Energy is unique among our midstream peers, with a comprehensive network of diverse energy assets across the continent. We are leveraging this network and our expertise, to find a reasonable balance between security, affordability and sustainability as we deliver the energy society relies on.

Natural gas will continue to play a crucial role in the energy transition and is a key solution for reducing global GHG emissions. Through liquified natural gas (LNG), the abundant North American supply can be exported around the world, serving as a driver for global energy security, reduced global emissions and economic growth.

TC Energy is on track to be the first and only energy infrastructure company delivering natural gas to LNG export facilities in Canada, the United States and Mexico. In the U.S., our natural gas system currently moves approximately 30 per cent of the feed-gas destined for LNG export. The recent completion of our Coastal GasLink Project, connected to Canada's first LNG export terminal on the Pacific coast, will open new markets for natural gas use around the globe.

In parallel, we are investing in power assets and low-carbon energy solutions with a focus on nuclear power generation and pumped hydro storage opportunities, critical for maintaining grid reliability. We are also developing capabilities in emerging energy solutions, such as carbon capture utilization and storage (CCUS) and hydrogen.

REDUCING OUR GHG EMISSIONS INTENSITY

Today, over 60 per cent of our sanctioned capital is allocated to projects that reduce emissions on our own systems, displace higher-emitting fuels with natural gas, or are low-carbon investments such as nuclear energy at Bruce Power. Over the last five years, we have reduced our methane emissions on an absolute basis as we have increased the volumes of natural gas flowing through our systems.



François L. Poirier
President and Chief Executive Officer

John E. Lowe
Chair of the Board of Directors

In January, long-standing board member, John E. Lowe, was appointed as Chair of the Board. John has been a member of the TC Energy Board of Directors since 2015 and served most recently as Chair of the Governance committee and as a member of the Health, Safety, Sustainability and Environment committee. His deep experience, sound judgement and long-term vision will help us deliver on our strategic priorities in a way that aligns with our sustainability commitments. John's rich perspective on sustainability practices is informed by his extensive leadership roles and advocacy for responsible energy production and environmental stewardship. He has actively engaged in dialogue about sustainable energy practices, including testifying on the energy challenges facing the United States and the world, reflecting his commitment to addressing environmental impacts associated with energy production.



In spite of these successes, geopolitical events and the ever-increasing demand for energy both locally and globally, continue to create challenges to meeting our short-term GHG reduction targets. We remain focused on our long-term goal of positioning to reach net zero emissions from our operations by 2050 and are progressing work to reassess our 2030 target.

Achieving our climate targets requires accelerating the pace of change across the global energy system, which includes policy and regulatory changes, and increased support for operationalizing new technologies.

To support our commitment, we are reducing methane emissions across our operations, considering GHG emissions reduction targets in our capital allocation and decision-making processes, collaborating with partners on advancing technologies and aligning our executive compensation with methane intensity reduction goals.

STRENGTHENING PARTNERSHIPS WITH INDIGENOUS COMMUNITIES

The expanding role of Indigenous communities is pivotal to our sustainable energy journey, and we are committed to learning from and collaborating with Indigenous peoples across our asset base. Recognizing the value of their participation, we believe that equity ownership is a powerful way to help understand and align their interests with those of the energy industry.

To advance this goal, we introduced the Canadian Indigenous Equity Framework in 2023. This inaugural initiative marks a significant step that contributes to economic reconciliation with Indigenous communities. Our commitment builds upon a long-standing history of fostering relationships and creating multigenerational opportunities.

RE-EMPHASIZING OUR FOCUS ON SAFETY

Our commitment to the safety of our people is integral to everything we do and underpins our pursuit of operational excellence. Yet last year, we faced a devastating incident resulting in the loss of four people.

In Mexico, four people died during an operational aerial patrol. We continue to mourn these profound losses, and it is critical we learn from them. Consequently, we conducted thorough investigations to understand root causes and are taking direct actions to prevent future tragedies.

In 2023, we unveiled a three-year safety roadmap focusing on leadership, management systems and operational discipline. Progress highlights include new training on hazard assessment and controls, a new safety event management system and a new framework for the TC Energy Operational Management System (TOMS). Aligning with evolving best practices in our industry, we have also changed our personal safety metric to focus on the most significant hazards and risks faced in the field. Using this risk-based approach, our Coastal GasLink project team completed 2023 with 55 million hours worked and exceptional safety performance.

We firmly believe that strong safety performance drives strong operational performance, ultimately leading to strong financial performance.

INCORPORATING DIVERSE PERSPECTIVES

Integrating diverse voices and perspectives at all levels, and in all areas of our business, is essential for fostering innovation, boosting productivity, and cultivating thoughtful, responsible practices – and we have set new targets to further this goal.

To bolster female representation throughout our workforce and at every level of the company, we aim to achieve a two per cent annual increase in the overall number of women over the next three years. Additionally, we've set and formalized a new requirement for the composition of our Board of Directors: to have at least one member who identifies as racially or ethnically diverse. We presently meet that goal, with 15 per cent of our Board now comprising members from visible minorities.

We understand that diversity and inclusion are fundamental to our long-term success and will continue to progress work in these areas. By embedding diversity and inclusion into our business practices, we can create a more inclusive, equitable and sustainable future for our employees, our partners and the communities we serve.

CONTRIBUTING TO A SUSTAINABLE ENERGY FUTURE

Our organization comprises over 7,000 people who bring expertise, dedication and integrity to their work every day. Coupled with our robust network of assets and services, we're excited by the opportunities for TC Energy to continue to make positive impacts on society, the environment and the economy over the long term.

We will also continue to manage our portfolio in support of the evolving energy needs in North America and globally, with sustainability considerations embedded in our decision-making processes, supported by robust governance principles and strong Board oversight of ESG and climate matters.

We appreciate your continued support and genuinely welcome comments and dialogue on our operations and our role in forging a sustainable energy future.

Sincerely,

François L. Poirier
President and Chief Executive Officer

John E. Lowe
Chair of the Board of Directors

July 2024



Q&A with the CSO

Reducing GHG emissions is challenging work that requires significant investment. Is TC Energy on track to meet its emissions reduction goals?

Our 2021 GHG emissions reduction plan set out an ambitious goal to reduce emissions intensity from our operations 30 per cent by 2030, compared to 2019, and a long-term commitment to position ourselves to reach net zero by 2050. Through focused leak detection, repair and prevention efforts, we have reduced our methane emissions by 15% since 2019, despite increasing throughput on our systems by 10% during this time. We are also investing prudently in other areas, including the electrification of compressors, the use of enclosed vapour combustors on Coastal GasLink and piloting new technologies such as CCUS and broader use of hydrogen.

Nevertheless, our current trajectory will see us fall short of our interim 2030 GHG emissions reduction target.

We are working diligently and responsibly to meet the unprecedented energy demand. This increasing demand and the hard-to-abate nature of our operations, which are dispersed over a vast geographic footprint, however, have created significant challenges. The outcomes of our capital rotation program, and the spinoff of our Liquids Pipelines business, are also affecting our plans.

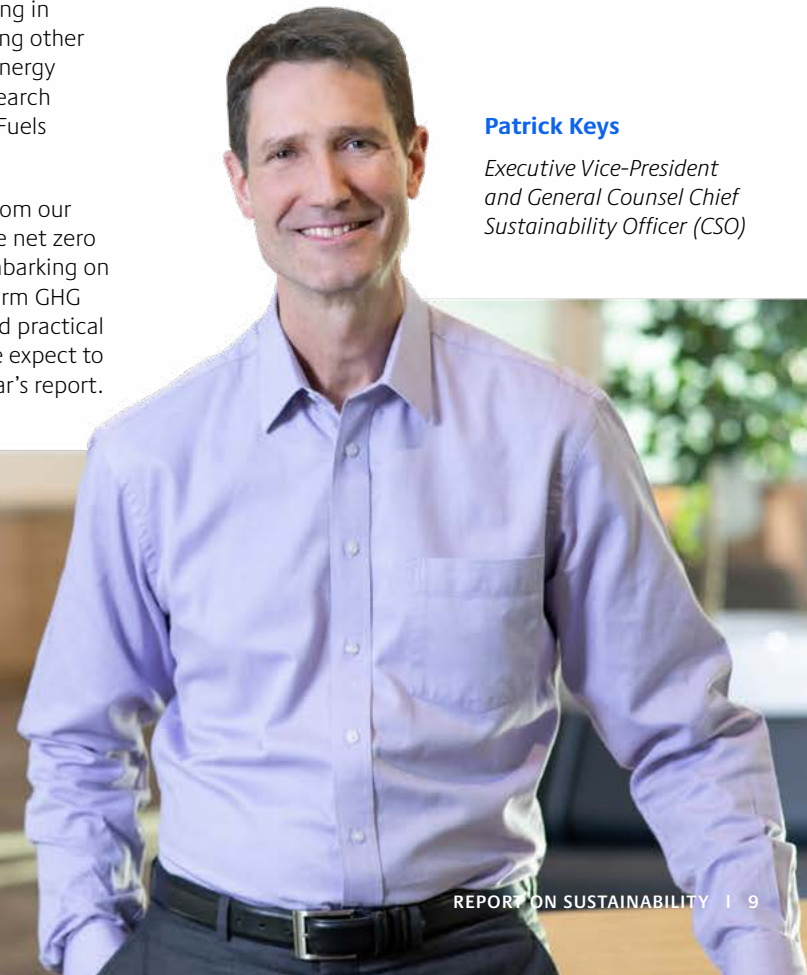
We must deploy emissions reduction strategies in a financially disciplined manner and in a way that is economically viable for our customers and our shareholders. More broadly, our ability – and that of our industry – to significantly reduce GHG emissions relies on favourable policy, regulatory and financial environments that allow newer technologies, such as CCUS and hydrogen, to economically scale. We are working to promote government policies and regulatory frameworks that provide pragmatic, reliable and cost-efficient GHG emissions solutions while still enabling us to meet society’s energy needs safely and reliably.

We are also working collaboratively across the industry. For example, we are partnering with Qube Technologies to deploy continuous real-time methane emissions monitoring technology. And, we are participating in industry groups and coalitions that are advancing other innovative technologies, such as Our Nation’s Energy Future Coalition (ONE Future), the Pipeline Research Council International (PRCI) and the Emerging Fuels Institute (EFI).

We remain committed to reducing emissions from our operations and positioning our operations to be net zero by 2050. However, in the near term, we are embarking on a comprehensive re-assessment of our short-term GHG emissions reduction targets and our options and practical pathways to achieve our longer-term plans. We expect to speak to refreshed targets and plans in next year’s report.

In North America there have been significant developments regarding mandatory climate-related disclosure requirements. How is the company preparing?

Sustainability reporting for Canadian companies is becoming increasingly demanding and complex, reflecting a shift in expectations and requirements. Stakeholders are now looking for more detailed and specific information, moving from voluntary reporting frameworks, standards and guidelines to more prescribed regulations. We actively monitor all proposed and emerging disclosure requirements and track new and evolving sustainability initiatives and policies at the regional, state, provincial and federal levels.



Patrick Keys

Executive Vice-President and General Counsel Chief Sustainability Officer (CSO)



We are continuing to enhance the sustainability information we report and prepare for mandatory sustainability disclosure by the Canadian Securities Administrators. Our enhancements in this year's report include a preliminary assessment of alignment to the voluntary standards of the International Sustainability Standards Board (ISSB) and the International Financial Reporting Standards (IFRS).

We are also continuing to strengthen the controls around the sustainability information we report and have again obtained limited assurance for our Scope 1 and 2 GHG emissions data and corporate emissions intensity. We plan to publish a roadmap to reasonable assurance in next year's report. Enhancements to Scope 3 reporting are also under evaluation.

Making meaningful progress on diversity, equity and inclusion (DEI) is key to attracting and retaining top talent. How is the company advancing its DEI goals?

Diverse perspectives fuel innovation and drive our success. We're committed to demonstrating fairness and respect across our organization, and we've set new targets to help us achieve this. We strive to foster an inclusive work environment where every team member can bring their best self to work.

This year, to further strengthen our Board and governance practices, we are committing to always include at least one racially or ethnically diverse member. We are pleased to advise we presently exceed that goal, and we also have once again surpassed our Board gender goal of 30 per cent female representation.

We have also added another new target to focus on our workforce as a whole, increasing the representation of women at the company by two per cent annually over the next three years. This includes female-identifying employees in all areas of our organization. Incorporating all levels and roles builds our talent pipeline and provides opportunities for all women to grow and develop within our organization.

Supporting this goal, in 2023 we celebrated the one-year success of the Women@TCE Employee Inclusion Network, which has grown into a vital community for networking, mentorship and professional growth. We also launched our Elevate(her) mentorship program to empower women throughout our organization.

Our Employee Inclusion Networks (EINs) continue to grow, serving as a platform for underrepresented voices and allies at work. This year, we also participated in the Special Olympics Canada Legacy Program, which helped us launch our inaugural disability-inclusive employment program in March 2024. And, we've embarked on a pay equity project to evaluate the fairness of compensation practices and foster equitable compensation, working towards Canadian Federal Pay Equity Act compliance by 2024 year-end.

Externally, our supplier diversity program continues to focus on increasing opportunities for diverse, local and Indigenous communities to participate in projects and operations.

This year TC Energy has changed its key personal safety metric to the High-Energy Serious Injury and Fatality (HSIF) rate. Why has the company made this change?

This year, we made a shift in our key personal safety metric and target to focus on the reduction of high-risk incidents. The choice to evolve from using the Total Recordable Case Rate (TRCR) to the High-Energy Serious Injury and Fatality (HSIF) metric aligns with evolving best practices in our industry and signals an important step forward in our safety journey.

Our decision is informed by research and data that show that the industry's focus on TRCR has not necessarily led to a corresponding decline in Serious Injury and Fatality (SIF) events, and we are seeing the same types of trends at TC Energy. To protect our people from the most serious risks—those that could be life-threatening or life-altering—focusing more intensely on significant safety hazards is necessary and important to improve overall safety.

Building on this, our new safety target embodies TC Energy's commitment to continuous improvement and a robust safety culture, where we encourage open dialogue and learning from high-consequence events.

A testament to the effectiveness of this risk-based approach is our success with Coastal GasLink, where the implementation of this strategy in 2020 led to a more than 70 per cent decrease in high-potential incidents, amidst some of the most complex and challenging project execution risks in our company's history.

We are guided by our values in everything we do, and safety remains our core value. No matter what our day-to-day priorities are, going home safe and healthy is the most important thing. In alignment with recommendations from our 2022 third-party safety-culture assessment through SafeStart, we developed a three-year safety roadmap, and we made significant strides in 2023.

For instance, we are simplifying and streamlining our management system and operating procedures using an industry best-practice approach, developing frontline and leader capabilities in controlling risks and hazards, improving our construction management and inspection program, and enhancing how we apply learnings from safety events. We have also integrated and centralized the safety function for our Natural Gas Pipelines business, which will significantly enhance our safety maturity, accelerating knowledge-sharing and collaboration among our safety professionals across various teams and geographical locations, with a front-line focused mindset.

The well-being of our team is of utmost importance, and we remain on track and committed to our safety journey.

The company recently introduced a new Canadian Indigenous Equity Framework. What is the significance of this new framework?

In our Reconciliation Action Plan, we committed to developing a framework for identifying project equity opportunities with Indigenous groups across our asset base. In 2023, we shared our inaugural Canadian



Indigenous Equity Framework. This framework sets the foundation for economic reconciliation by intertwining our interests with those of Indigenous communities, in a collective pursuit of prosperity.

Through ongoing collaboration and dialogue with Indigenous groups, we have heard that Indigenous people want to share in the economic prosperity of Canada's resource economy through ownership and resource development that will lead to greater economic self-sufficiency and self-determination.

Aligned with these principles, in June 2024, we closed the sale of all outstanding shares in Prince Rupert Gas Transmission Holdings Ltd. and the limited partnership interests in Prince Rupert Gas Transmission Limited Partnership to the Nisga'a Nation and Western LNG. These like-minded buyers are focused on building net zero LNG infrastructure and reducing global energy emissions while enhancing opportunities for Indigenous peoples.

We're also engaging with provincial and federal governments to advocate for programs that enable Indigenous equity financing. This includes support for the Government of British Columbia's First Nations Equity Financing Framework released in February 2024, as well as the recently announced Canadian Federal Indigenous Loan Guarantee program. This program empowers Indigenous Communities to participate in investing in critical energy infrastructure and is the result of years-long advocacy efforts led by Indigenous groups and supported by energy industry partners, like TC Energy.

We will continue to listen and learn through meaningful engagement and put those learnings into action, as we further embed reconciliation into how we do business.

Following the favorable shareholder vote on South Bow in June, what strategies is the company using to advance sustainability objectives post-spin?

In 2022, we completed a comprehensive [materiality assessment](#), engaging multiple internal and external stakeholders through an evidence-based evaluation of the sustainability topics material to our business and stakeholders. The separation of our Liquids Pipelines business necessitates a refresh of this materiality assessment. This work will inform and refresh our sustainability strategy and commitments and will allow us to confirm current and emerging shareholder, stakeholder and rightsholder priorities.

In 2025, our annual Report on Sustainability will no longer include performance data or narrative pertaining to our Liquids Pipelines business. These changes will ensure our data accurately reflects our post-spinoff operations and sustainability achievements.

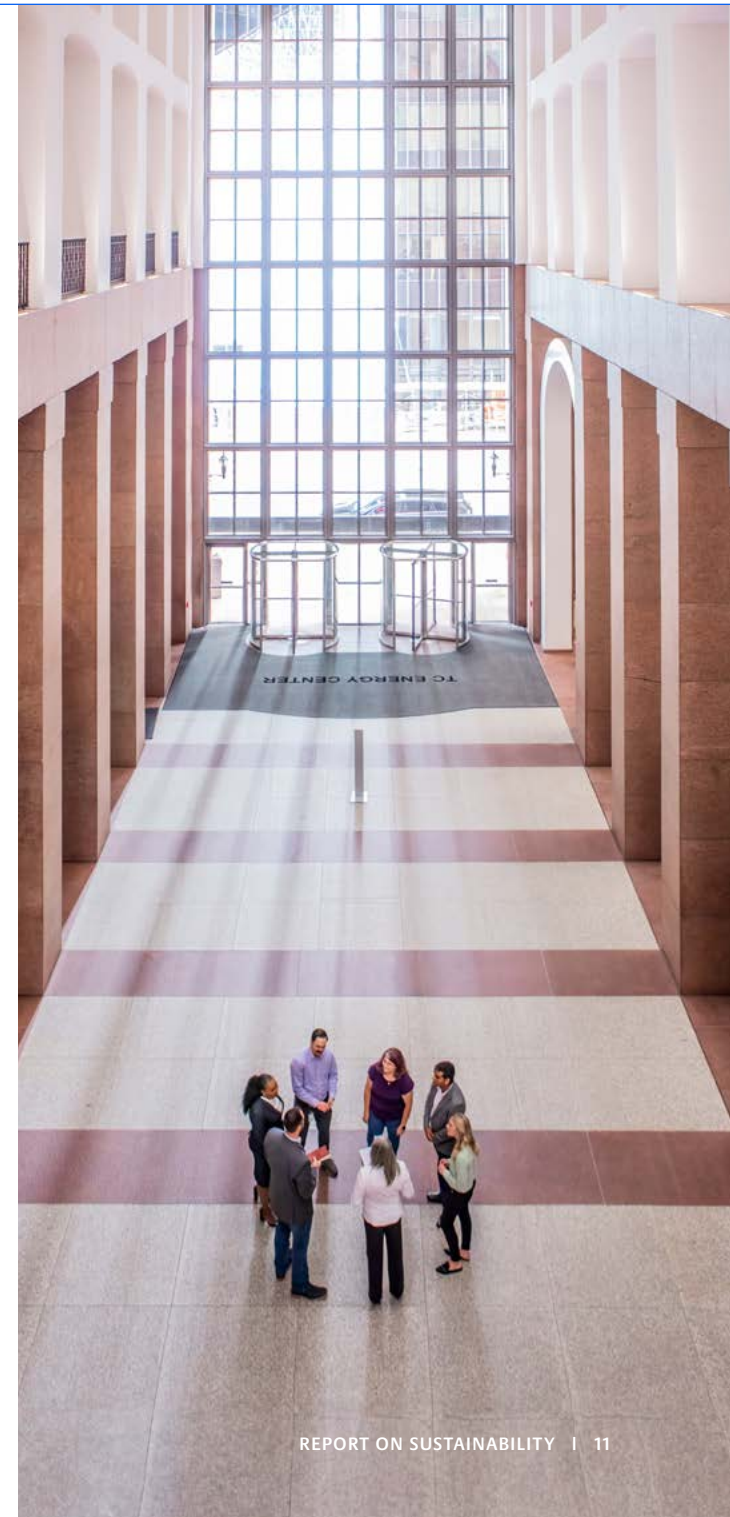
My commitment as CSO is to continue driving positive and sustainable change across our operations, and I invite our stakeholders to engage in comments, questions and dialogue with us. Our success in sustainability is a collective effort, and your insights are valuable to us. Together, we can build a more sustainable and resilient future for all.

Sincerely,

Patrick Keys

*Executive Vice-President and General Counsel
Chief Sustainability Officer (CSO)*

July 2024





About this report

TC Energy's reports and disclosures represent our ongoing commitment to transparency of environmental, social, economic and governance information, relevant to our business, rightsholders and stakeholders. In this Report on Sustainability, we provide a consolidated view of our sustainability efforts with the aim of providing clear, factual and balanced overview and summary of our performance.

This report contains forward-looking information or forward-looking statements. For more details, please refer to the [forward-looking information statement](#). Financial data in this report is stated in Canadian dollars, unless otherwise noted. Please refer to our 2023 Annual Report for more details on our financial performance. Footnotes provide additional information on definitions and methodologies where appropriate and as applicable.

This year's design has been developed with consideration of Web Content Accessibility Guidelines (WCAG) 2.0 accessibility standards. This report contains perspectives of sustainability-related endeavours, through employee-submitted photos.

Reporting guidance

The information included in this report has been developed with guidance from internationally recognized sustainability reporting frameworks, standards and recommendations, including the Task Force on Climate-Related Financial Disclosure (TCFD), which now forms part of the International Financial Reporting Standards (IFRS) Foundation's International Sustainability Standards Board (ISSB), Sustainability Accounting Standards Board (SASB), UN SDGs and Global Reporting Initiative (GRI). There are new mandatory climate-related disclosure requirements under development in jurisdictions in which we operate. These developing disclosure requirements may impact how we report our climate-related risks and opportunities, strategy, risk management and GHG emission metrics and targets, including our progress towards achieving sustainability goals. We continue to monitor these developments and adjust our disclosure and public statements accordingly to comply with these new mandatory requirements. Where non-standard measures are required, we have disclosed the information in alignment with our internal standards. Please refer to the alignment tables in the [Appendix](#).

Reporting boundaries

The scope of this report reflects all assets that we operate, unless otherwise noted. This report focuses on performance and activities from January 1 to December 31, 2023, or status as of December 31, 2023, whichever is applicable, unless otherwise noted. Details of select significant and relevant events that occurred in early 2024 have also been included. Data exclusions or additions are noted where applicable in the report.

Assurance

The information in this report has been closely reviewed by internal subject matter experts and senior leaders, including our Executive Leadership Team, with oversight from our Board of Directors. As part of our practice to continually improve our reporting, we have obtained independent third-party limited assurance of select 2023 environmental and social indicators, which are identified with the symbol ^ throughout this document. To read the third-party limited assurance statement, please refer to our [ESG webpage](#).

TC Energy has committed to publishing a [Roadmap to Reasonable Assurance on GHG Reporting in July 2025](#).

Invitation for feedback

TC Energy welcomes all feedback on this report. Please send questions or comments to communications@tcenergy.com.

Related publications and links:

- + [2023 Annual Report](#)
- + [2024 Management Information Circular](#)
- + [2023 Annual Information Form](#)
- + [Reconciliation Action Plan and 2022 Reconciliation Action Plan Update](#)
- + [GHG Emissions Reduction Plan](#)
- + [Report on Reliability of Methane Emissions Disclosure](#)
- + [Report on Climate-related Lobbying](#)
- + [2023 CDP climate change questionnaire response](#)
- + [2023 Forced Labour and Child Labour Report](#)
- + [ESG webpage](#)



STRATEGY



IN THIS SECTION

- 14 Our sustainability journey
- 17 Strategy and progress

Our approach to sustainability is thoughtful, systematic and collaborative and is integral to our strategic priorities. Strong governance, a culture of innovation and a focus on continuous improvement allows us to adapt, evolve and create value for our rightsholders and stakeholders.



OUR SUSTAINABILITY JOURNEY

LEGEND

- The world around us
- Governance
- Strategy
- Risk management
- Metrics and targets

1990's

- First HSE management system
- Established formal pipeline integrity program
- Voluntary climate change and GHG reporting

2000's

- Introduced asset management system
- First Corporate Social Responsibility report
- Purchased first GHG offset
- System-wide risk assessment process for pipeline integrity

2010's

- Inaugural materiality assessment
- Inaugural ESG Data Sheet
- Committed to third party-aligned GRI reporting

2015

- Paris Agreement formalized
- UN SDGs formalized
- Developed Supplier Diversity & Local Participation Program
- Materiality assessment refresh

2016

- Management system integration and TOMS introduction
- Introduced Chief Diversity Officer
- Materiality assessment refresh
- Established Life Saving Rules
- First aligned reporting with GRI G4 Core option Guidelines

2017

- TCFD releases Final Report
- Elevated safety as a corporate value to advance our safety culture

2018

- SASB approves industry standards
- Adopted Board Diversity policy
- Added sustainability to Board Health, Safety and Environment Committee
- Introduced 2°C case into strategic planning scenario analysis
- Introduced Chief Risk Officer
- Adopted Enterprise Risk Management system
- Inaugural SASB-aligned data sheet

2019

- Introduced Chief Sustainability Officer
- Inaugural TCFD-informed reporting

2020

- Internal materiality refresh
- TCFD-aligned reporting
- Developed sustainability commitments and released targets
- UN SDG-aligned reporting

2021

- Set targets for every commitment
- Published Reconciliation Action Plan
- Published GHG Emissions Reduction Plan

2022

- Linked compensation to progress on our ESG priorities
- Became a signatory to the Women's Empowerment Principles (WEP)
- Formed Indigenous Advisory Council
- Joined Catalyst
- Joined the UN Global Compact
- Refreshed our sustainability commitments
- Joined the Task Force on Nature-based Financial Disclosures (TNFD) forum
- Obtained third-party limited assurance on select environmental indicators

2023+

- Issuance of the inaugural IFRS Sustainability Disclosure Standards
- European Union adopts the Corporate Sustainability Reporting Directive (CSRD)
- Initiated Sustainability Management Committee
- Further embedded sustainability into capital allocation process
- Joined the Conference Board DEI Council community
- Published our Canadian Indigenous Equity Framework
- Published Forced Labour and Child Labour Report
- Launched our new TOMS Framework
- Obtained third-party limited assurance on select environmental and social indicators



United Nations Sustainable Development Goals

The [UN SDGs](#) are a call to action to address current and future global challenges to create a better, more sustainable world. The 17 SDGs are global goals that create a blueprint for sustainability strategies to address challenges, including inequality, climate change, environmental degradation, peace and justice. TC Energy uses the SDGs to guide our sustainability efforts within a globally recognized framework. Throughout the report, we demonstrate our contributions to this worldwide agenda and how our targets align with the SDGs.

SUSTAINABLE DEVELOPMENT GOALS



TC Energy became an official participant of the [United Nations Global Compact](#) (UNGC) in 2022. We are committed to making the UNGC and its principles part of our business culture and day-to-day operations, as well as collaborating on projects that advance the broader development goals of the UN, particularly its SDGs. This report describes the actions we have taken to implement the UNGC guidelines and principles and serves as our Communication on Progress (CoP).

WE SUPPORT



[WANT TO LEARN MORE?](#)

+ [Embedding the United Nations Global Compact principles into TC Energy's strategy](#)



Stakeholder engagement

TC Energy is proud of the strong relationships we have built with rightsholders and stakeholders across our geographies, and we are continuously seeking ways to strengthen these relationships.

Beyond our core values, we have specific stakeholder programs and policies that shape our interactions, clarify expectations, assess risks and facilitate mutually beneficial outcomes.

HOW WE ENGAGE¹

EMPLOYEES AND CONTRACTORS	<ul style="list-style-type: none"> Internal surveys Townhalls, employee forums, and webcasts Leader and employee bulletins and newsletters Oboarding, career development planning and mentorship opportunities 	<ul style="list-style-type: none"> Ethics Help-Line Company Intranet Value moments (safety, environment, integrity, mental health, etc.) TC Unlocked learning sessions 	<ul style="list-style-type: none"> Mental health and Inclusion & Diversity champions Employee Inclusion Networks Social media channels Social Impact programs including community investment, volunteering and scholarships
CUSTOMERS AND SUPPLIERS	<ul style="list-style-type: none"> Customer satisfaction surveys Formal and informal meetings and presentations Face-to-face meetings 	<ul style="list-style-type: none"> Supplier relationship management meetings Events and industry conferences Collaboration and strategic partnerships 	<ul style="list-style-type: none"> Online customer news, information resources and tools Customer bulletins Onboarding
INVESTORS	<ul style="list-style-type: none"> Annual General Meeting of shareholders Annual Letter to Shareholders Annual investor day 	<ul style="list-style-type: none"> Quarterly earnings calls and business update Regulatory filings and news releases Analyst engagement meetings and conference calls 	<ul style="list-style-type: none"> Participation and engagement at investor conferences and forums Ongoing investor engagement meetings and presentations (materials available on our website)
LANDOWNERS AND LOCAL COMMUNITIES	<ul style="list-style-type: none"> Letters, factsheets, brochures and newsletters Townhalls and open houses Landowner meetings Community meetings and events 	<ul style="list-style-type: none"> In-person facility tours Social Impact programs including community investment, volunteering and scholarships Ethics Help-Line 	<ul style="list-style-type: none"> Emergency preparedness and response Click-before-you dig website, One Call Centers (Canada and U.S.) and landowner helplines Social media channels
INDUSTRY GROUPS, GOVERNMENT AND REGULATORS	<ul style="list-style-type: none"> Facility and asset tours Trade association and industry representation Industry conferences, gatherings, and panels 	<ul style="list-style-type: none"> Face-to-face meetings and webinars Roundtable consultations Industry analysis and research papers 	<ul style="list-style-type: none"> Multi-stakeholder initiatives and research groups Public policy response submissions and legislative engagements Regulatory filings and news releases
INDIGENOUS GROUPS	<ul style="list-style-type: none"> Economic partnership opportunities, including equity and other agreements Reconciliation Action Plan and update 'Hire and Buy Local' engagement with Indigenous Communities 	<ul style="list-style-type: none"> Social Impact programs including community investment, volunteering and scholarships Participation in cultural ceremonies and community events Emergency preparedness and response 	<ul style="list-style-type: none"> Site visits, traditional knowledge studies, and engagement to mitigate potential impacts Construction monitoring program, workforce accommodation program, and Indigenous working groups In-person facility and control room tours

¹ Select examples of related policies, guiding principles and/or documents supporting our stakeholder engagement strategy are included in the [Appendix](#).



STRATEGY AND PROGRESS

Material topics

As we refine our sustainability strategy, it is critical for us to undertake materiality assessments² to focus on the non-financial topics that are of greatest relevance and importance³ to our stakeholders and our business.

In 2024, TC Energy plans to undertake a comprehensive materiality assessment to reassess the sustainability topics most relevant to our business, rightsholders and stakeholders.

[WANT TO LEARN MORE?](#)

[+ 2022 sustainability materiality assessment](#)



² References and use of the terms “materiality,” “material,” and similar terms throughout this document are in the context of economic, environmental, social and governance topics. For ESG topics, materiality is based on definitions in referenced sustainability frameworks, standards and guidelines and do not correspond to the concept of materiality under Canadian or U.S. securities laws.

³ Sustainability materiality assessments are a moment-in-time snapshot of current topics of importance.



Sustainability commitments

We regularly revisit and refresh our sustainability commitments as the result of our materiality assessments, our collaboration and engagement with stakeholders and rightsholders, external influencing factors and other considerations.

ENVIRONMENT



Embracing the energy transition

Contribute to global efforts to address climate change and manage the risks and opportunities of the energy transition



Leaving the environment as we found it

Safeguard habitat and biodiversity and minimize land use impacts, including restoring the environment to a condition equal to or better than we found it



Committed to safe, reliable, sustainable operations

Systematically manage risk to continuously improve the integrity and safety of our assets and operations

SOCIAL



Continuous safety improvement

Continuously improve our systems to protect people and consistently demonstrate safety as our number one value



Focus on mental health

Demonstrate actions that enhance employee psychological safety and emotional wellbeing



Fostering mutually beneficial relationships

Promote wellbeing for our communities and maintain mutually beneficial external relationships



Fostering enduring, mutually beneficial relationships with Indigenous groups

Be the partner of choice for Indigenous groups



Furthering inclusion and diversity

Strengthen collaboration and performance by promoting inclusion and diversity across our organization and supply chain

GOVERNANCE



Further integrate and contribute to sustainability






Advance sustainability and innovation across our business and value chain, including our strategic planning and decision-making



Targets and performance

We commit to providing a transparent view of our performance across several topics. Our success is achieved through the capabilities and expertise of our workforce, the extent to which we embrace technology and encourage innovation, and our strategy to provide long-term value to our stakeholders.

Our 2023 progress is captured below, with further information and details provided throughout this report and related documents.

	COMMITMENT	METRIC	TARGET	2023 PERFORMANCE	PAGE	
ENVIRONMENT	 Embracing the energy transition	Reduce GHG emissions intensity from our operations	30% by 2030 ⁴	Under review	32	
		Position to achieve zero emissions from our operations on a net basis	By 2050 ⁴	In progress	32	
	 Leaving the environment as we found it	Restore or offset all land disturbances resulting from construction and operation of our North American assets ⁵	100%	99%	42	
		Invest in activities that restore biodiversity and reduce the impacts of climate change	\$10 million invested by end of 2025	\$3.5 million	45	
SOCIAL	 Committed to safe, reliable, sustainable operations	Maintain our dedication to improving personal and process safety performance	Zero significant process safety incidents ⁶	1	37	
		 Continuous safety improvement	Maintain our dedication to improving personal and process safety performance	Combined (employee and contractor) TRCR ⁷ : 0.5 in 2023	Not achieved ⁸	49
			Strengthen our focus and commitment on the prevention of major accidents and serious incidents	Combined (employee and contractor) High Energy Serious Injury and Fatality ⁹ rate: not to exceed 25 per 100M hours in 2024 ¹⁰	New	49
	 Focus on mental health	Increase mental health awareness by providing leader and employee training and other topical resources	100% of employees trained by end of 2023	99%	57	

⁴ Our targets address Scope 1 and Scope 2 GHG emissions. For planning purposes, target progress is measured relative to a 2019 baseline year, adjusted for material changes in our asset portfolio and quantified on an operational control boundary.

⁵ Restoration activities are multi-year efforts with end-of-activity targets rather than annual targets. Further information is provided in the [Appendix: Performance data](#).

⁶ While significant process safety incidents may have an environmental impact, not all process safety incidents will have an environmental impact. This is merely one factor considered when determining whether or not an incident is classified as 'significant'.




⁷ TC Energy defines total recordable case rate as the number of recordable cases related to a common exposure base of 200,000 hours (100 full-time employees). Recordable cases are all work-related deaths and illnesses and those work-related injuries that result in a loss of consciousness, restriction of work or motion, transfer to another job or require medical treatment beyond first aid.

⁸ Due to the tragic loss of four lives in a Mexico aviation incident, this target was not achieved.

⁹ 'High energy' defined as an element of work that involves more than 500 ft-lbs. of physical energy. 'Serious injury' defined as a life-threatening and life-altering incident.

¹⁰ Target based on annual rate of high energy serious injuries and fatalities per 100 million hours, as of December 31, as adapted from Construction Safety Research Alliance (CSRA) serious injury and fatality rate calculation methodology. Internally, we use a 12-month rolling rate to identify changes in the pace or direction of trends.



COMMITMENT		METRIC	TARGET	2023 PERFORMANCE	PAGE
SOCIAL	 Fostering mutually beneficial relationships	Sustain annual employee participation in our social impact program, to strengthen workforce and community wellbeing	60% workforce participation through 2025	60%	65
		Grow social impact investments to help strengthen local community, Indigenous group and workforce resilience	\$25 million (annually) through 2023	\$34 million	59
			Increasing to \$30 million (annually) by end of 2025	In progress	59
	 Fostering enduring, mutually beneficial relationships with Indigenous groups	Identify and support community-led reconciliation initiatives through partnerships with Indigenous groups	Ongoing	Ongoing	69
		Establish an external Indigenous Business Advisory Council to advise our business units, Supply Chain, and Indigenous Relations groups on best practices and obstacles to working with TC Energy	Established by Q3/2023	Not achieved	67
			Operationalized in Q4/2023	Not achieved	67
		Establish an external Indigenous business group to provide feedback to our business units, Supply Chain, and Indigenous Relations groups on best practices and obstacles to working with TC Energy	Operationalize a pilot Indigenous business group by end of Q4 2024	New	67
	 Furthering inclusion and diversity	Diversity of our Board of Directors ¹¹	30% women on Board	38%¹²	80
			At least one member who identifies as racially and/or ethnically diverse ¹³	New	80
		Women in leadership positions in our corporate locations ¹⁴	40% by 2025	36%[^]	51
Overall representation of women across our workforce ¹⁵		2% annual increase over next 3 years	New	51	
Members of visible minorities in leadership positions across our Canadian and U.S. workforce ¹⁶		17% by 2025	17%	51	
Increase spending with diverse suppliers in Canada and the U.S.	Increase percentage of diverse influenceable procurement spend 5% year-over-year through to 2027 ¹⁷	4%	72		

¹¹ Details for this metric and associated targets can be found in our [Governance section: Board diversity](#)

¹² 38.5 per cent women on the Board of Directors (5 of 13 members), as of April 10, 2024.

¹³ Racially and/or ethnically diverse means Aboriginal peoples (persons who are Indigenous, Inuit or Métis) and members of visible minorities (means persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour).

¹⁴ Leadership positions in our corporate locations of Calgary, Houston, Charleston and Mexico City.

¹⁵ Includes women and female-identifying individuals at all levels, in all locations (Canada, U.S. and Mexico, both corporate and field locations).

¹⁶ Leadership positions across our workforce in Canada and the U.S.

¹⁷ Influenceable procurement spend is defined as purchase order procurement spend and release order procurement spend of Tier 1 suppliers.

COMMITMENT	METRIC	TARGET	2023 PERFORMANCE	PAGE	
GOVERNANCE Further integrate and contribute to sustainability	Optimize operational and project effectiveness and efficiency through organizational, digital and technological innovations	\$115 million to \$120 million by 2023	\$95 million	81	
		\$10 million to \$15 million in 2024	New	81	
		\$80 million per year engineering R&D value creation ¹⁸	\$141 million	82	
		Incorporate sustainability drivers and measures in enterprise-wide Integrated Asset Investment Planning Framework, leveraged in program planning for existing assets	Pilot various measures to express sustainability value by end of 2023 ¹⁹	Achieved	81
			Determine portfolio contributions by end of 2024	In progress	81
		Adopt voluntary social impact measurement criteria and establish a 2024 baseline for metrics and targets in 2025 and beyond	Establish baseline in 2024	In progress	85
	Launch metrics and targets in 2025	In progress	85		

¹⁸ "Value creation" includes value realized through engineering research and development (R&D) initiatives implemented in TC Energy programs. Engineering R&D creates accuracy, precision, and efficiency in decision-making tools and processes which creates smarter and sharper decisions that enable both safety and economy leading to sustainability.

¹⁹ Asset Management measures include, but are not limited to, reliability, and safety and environmental risk reduction.





ENVIRONMENT



IN THIS SECTION

- 24** Climate change and the energy transition
- 36** Operational management
- 39** Environmental management

We are committed to protecting the environment and respecting the diverse landscapes where we work. Whether expanding our footprint or maintaining existing assets, our approach to land and ecosystems is based on our core values. We work closely with rightsholders and stakeholders to minimize disturbance and to preserve and maintain the environment for communities and wildlife.



ENVIRONMENT COMMITMENTS



Embracing the energy transition

Contribute to global efforts to address climate change and manage the risks and opportunities of the energy transition

GHG emission intensity reduction from our operations pg 32

Position to achieve net zero from operations pg 32



Leaving the environment as we found it

Safeguard habitat and biodiversity and minimize land use impacts, including restoring the environment to a condition equal to or better than we found it

Land restoration pg 42

Environmentally-focused community giving pg 45



Committed to safe, reliable, sustainable operations

Systematically manage risk to continuously improve the integrity and safety of our assets and operations

Significant process safety incidents pg 37

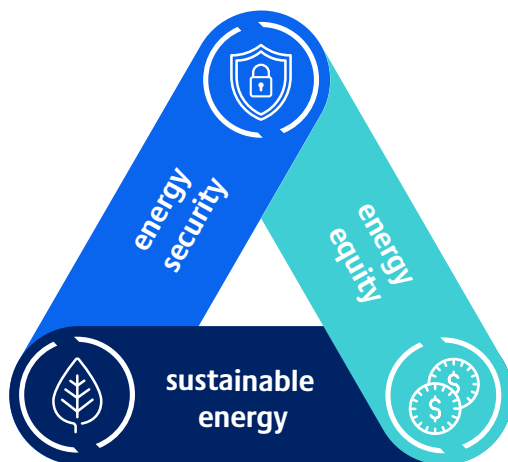




CLIMATE CHANGE AND THE ENERGY TRANSITION



Energy security, accessibility and affordability, and environmental sustainability — these are the real-world tensions the World Energy Council identifies as the 'energy trilemma'. For TC Energy, this three-pronged challenge is how we think about our strategic response to climate change. Critically, rising global energy demand, both in North America and globally, combined with disruptions to global energy shipments, geopolitical turmoil, unprecedented weather events, and consumer reaction to high energy prices and shortages only reinforces the need to provide affordable, reliable and secure energy as we transition to lower-emission economies.



Our [2023 Annual Report](#) outlines how climate considerations are embedded in our business practices and outlook. We monitor trends specific to energy supply and demand fundamentals, in addition to analyzing how our portfolio performs under different energy mix scenarios. This enables the identification of opportunities that contribute to our resilience, strengthen our asset base or improve diversification. As climate-related risks and opportunities are identified, we are preparing our people and systems to manage our contribution to a rational and balanced energy transition. We envision a future energy mix that is less carbon-intensive yet secure and affordable.

TC Energy's asset mix is evolving alongside the North American energy mix. As the world progresses towards a lower-emissions future, our capital allocation is shifting to meet that demand, while balancing energy security and affordability needs:

- Natural Gas Pipelines will continue to attract capital, driven by coal to gas conversion and by LNG exports.
- Power and Energy Solutions' weighting in our portfolio is expected to gradually grow over time, with more emphasis on nuclear power and pumped hydro storage. Measured investment in emerging technologies will develop capabilities that are complementary to our core business, without taking significant commodity price, volumetric or technology risk.

Meeting rising energy demand while decarbonizing the global economy is the defining energy challenge we are working to solve. While we must continue to innovate and scale up generation and storage including nuclear and hydro, natural gas is the only readily deployable energy source capable of achieving the needed levels of reliability, affordability, and scalability — and North America is best positioned to deliver it. TC Energy's unique position across North America, combined with our deep expertise and forward-thinking vision, will allow us to harness the continent's vast energy resources as we move through this multidimensional transition together.



We are on track to be the first and only energy company delivering natural gas to LNG export facilities in Canada, the United States, and Mexico."

DR. JULIA NESHEIWAT
Vice-President, Policy & Insights

WANT TO LEARN MORE?

- + [Our vision for North American energy](#)
- + [TCFD and IFRS S2 - Climate-related risks and opportunities](#)



DIMINISHING GLOBAL GHG EMISSIONS WITH LIQUIFIED NATURAL GAS

The criticality of energy security and diversification is clear. The disruption of global LNG markets as Europe imported record LNG volumes to replace Russian gas, caused price shocks and a return to more carbon-intensive forms of energy, like coal.

North America is strategically positioned to meet growing global energy demand that offers a pathway to lower energy emissions and maintain energy security. TC Energy is well placed to support this growth, delivering natural gas to LNG export terminals across North America. In Canada, the completed Coastal GasLink (CGL) pipeline is the first direct path for Canadian natural gas to reach global LNG markets. In the U.S., we transport nearly 30 per cent of all North America LNG feedstock. And in Mexico, our connectivity provides LNG supply and flexibility to both Europe and Asia.

WANT TO LEARN MORE?

- + [Statement: Coastal GasLink achieves mechanical completion](#)
- + [Operational overview: Coastal GasLink](#)

²⁰ From 2013 to 2024. One full time-equivalent job is equivalent to output of one person working for one year, but not necessarily by the same worker.
²¹ Over the course of the project (2013-2024).
²² Including sales, products, production, personal and corporate income (from 2013-2024).
²³ Project spending on equipment, food services, accommodations, and other construction services (from 2013-2024).
²⁴ Since 2014.

Coastal GasLink by the numbers



More than **25,700** full time-equivalent jobs created in British Columbia (B.C.)²⁰



Five years of construction, spanning a global pandemic, supply chain disruptions, and a highly competitive labour market



55 million hours worked with exceptional safety performance



8 world-class prime contractors, many with local Indigenous partnerships to deliver lasting community benefits



\$3.2 billion contributed to the B.C. GDP²¹



Unprecedented support from all **20 out of 20** elected Indigenous groups, with **17 signing equity options** to become owners



\$331 million in B.C. tax revenues²²



Over **\$1.8 billion** worth of contracts awarded to local and Indigenous businesses



\$3.95 billion spent on B.C. businesses and suppliers²³



More than **\$13 million** invested into local communities, non-profits, and sponsorships



670 km of pipeline, safely traversing **two mountain ranges** and some of B.C.'s most challenging terrain



820 students in B.C. received scholarships or bursaries²⁴



800 water crossings and **10 major trenchless water crossings** safely completed



Over **750 personnel** trained and certified in erosion and sediment control, the largest in B.C.



Greenhouse gas emissions

Each of our business segments continues to execute GHG emission reduction strategies and identify opportunities to reduce emissions. We are upgrading our infrastructure and processes while we collaborate with suppliers, customers and peers to measure, monitor and reduce GHG emissions. We also consider our GHG emissions reduction targets in our capital allocation framework and decision-making process.

OUR APPROACH TO SCOPE 1, 2 AND 3 EMISSIONS

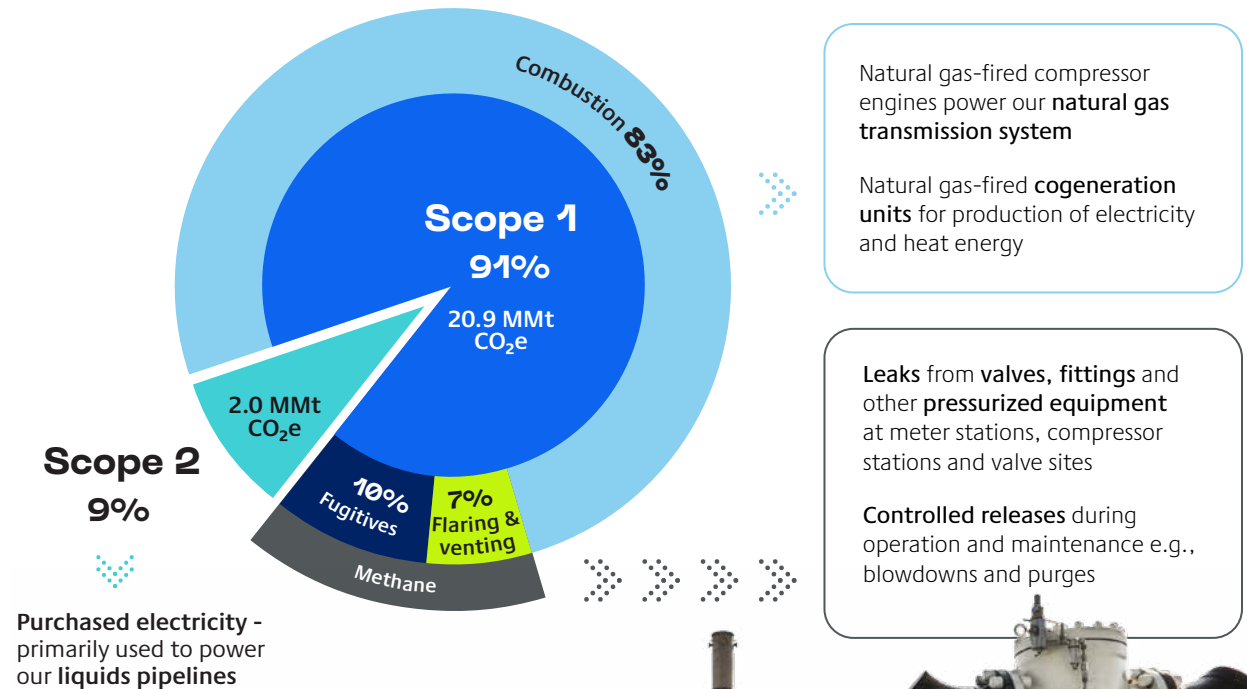
TC Energy has established an internal standard and methodologies for annually quantifying and reporting Scope 1, Scope 2, and select Scope 3 GHG emissions. Our GHG inventory aligns with the GHG Protocol Corporate Accounting and Reporting Standard, as well as related GHG Protocol guidance documents for Scope 2 and Scope 3 emissions.

The quantification of GHG emissions follows prescribed regulatory methodologies in the jurisdictions in which we operate. This can include using measured fuel consumption, composition data, electrical utility metering, operational activity data, and regulatory emission factors and engineering estimates. For GHG emissions not subject to regulatory reporting, we use quantification methods consistent with regulatory approaches. Where applicable, we use operationally derived emission factors from measured data.

TC Energy's GHG emissions are reported both on an equity share and operational control approach to illustrate the difference in our GHG emission footprint between the two organizational boundaries of reporting. The equity share reporting boundary best reflects our corporate GHG emission footprint in relation to the percentage of ownership held across our operated and non-operated assets, and more closely aligns with our financial performance results. The operational control boundary data represents the GHG emission footprint from assets that we operate and are therefore influenced by TC Energy's operational practices.

²⁵ 2023 GHG emissions reported on an operational control reporting boundary. Totals may not add due to rounding.

Percentage Breakdown of Scope 1 and Scope 2 2023 GHG Emissions²⁵



Purchased electricity - primarily used to power our liquids pipelines





Highlight: Scope 3 reporting

Scope 3 emissions are indirect GHG emissions resulting from TC Energy business activities, such as procuring goods and services that we do not own or control. While not directly owned or controlled, these emissions are part of our value chain.

In 2023, TC Energy conducted an independent analysis to assess the applicability of the 15 Scope 3 categories to our business. Based on the analysis, we determined ten categories are relevant to our business and value chain. [We currently report four of the ten categories.](#) The remaining six are being assessed against current reporting guidance and quantification methodologies.

TC Energy's core business of product transmission and storage is not captured by the GHG Protocol's definition of Category 11 – Use of sold products. Although we purchase small volumes of commodity products for operational or marketing purposes, the majority of product that we transport and market are not owned by us and we do not sell the transported products to end-use consumers. As such, Scope 3 Category 11 is considered non-relevant to our core business activities.

Quantification of Scope 3 emissions is complex. The calculation and reporting methodologies for Scope 3 are not precise or uniform. They rely primarily on information from partners in our value chain and are outside our internal control and assurance processes. Scope 3 measurement standards and reporting processes require significant maturation to achieve disclosure comparability and accuracy. We expect our indirect GHG emissions determination and quantification to be iterative, improving over time.

Applicability of Scope 3 categories to core business

1	Purchase goods and services	✓
2	Capital goods	✓
3	Fuel and energy related activities	✓
4	Upstream transportation and distribution	✓
5	Waste generated in operations	✓
6	Business travel	✓
7	Employee commuting	✓
8	Upstream leased assets	✓
9	Downstream transportation and distribution	✗
10	Processing of sold products	✗
11	Use of sold products	✗
12	End-of-life treatment of sold products	✗
13	Downstream leased assets	✓
14	Franchises	✗
15	Investments	✓

✓ Relevant / evaluating for future disclosure

✗ Not relevant to core business

[Currently reported](#)

TC Energy recognizes the importance of clear guidance to improve comparability and consistency in Scope 3 emissions quantification and reporting. To that end, we supported a forthcoming revision of Ipieca's oil and gas-specific guidance, sharing practical accounting experience and sector-specific considerations. We also provided feedback to supplement Ipieca's response to the GHG Protocol Scope 3 survey, signalling industry's support for refining the guidance to navigate quantification complexity. Additionally, we are collaborating with industry peers to identify opportunities for alignment and consistency in Scope 3 reporting practices.

Activities our businesses are undertaking to reduce our own, our customers', and our partners' GHG emissions include:

- Working alongside our peers in the natural gas industry to identify reliable methane intensity measurement and reconciliation protocols across the value chain.
- Offering alternatives to end-use customers in the form of competitive, reliable, and efficient natural gas pipelines and supply sources, renewable power products and other lower-emission energy solutions, such as renewable natural gas (RNG), LNG and hydrogen.
- Continued operational efficiency improvements to reduce energy consumption and use.
- Exploring Scope 3 emissions reduction opportunities with strategic suppliers.



Progress on methane emissions

2023 methane insights

15%

METHANE EMISSIONS DECREASE FROM 2019 BASELINE

10%

NATURAL GAS THROUGHPUT INCREASE SINCE 2019

17%

METHANE EMISSIONS AS AN ESTIMATED % OF TC ENERGY'S SCOPE 1 GHG EMISSIONS

WANT TO LEARN MORE?

+ [Report on Reliability of Methane Emissions Disclosure](#)

Domestic and international natural gas demand drove TC Energy's throughput to increase by 10 per cent in 2023 from 2019. As methane is the principal component of natural gas, reducing fugitive and vented methane is

critical to achieving a lower-emission future. Methane has approximately 25 times the global warming potential of carbon dioxide, prompting countries, including Canada, the U.S. and Mexico, to sign the [Global Methane Pledge](#) to reduce global methane emissions by at least 30 per cent by 2030. As one of North America's leading natural gas transportation providers, we recognize the responsibility to manage our own methane emissions. Currently, methane is an estimated 17 per cent of our Scope 1 GHG emissions.

MORE ACCURATE METHANE MEASUREMENT

TC Energy is improving the quality and transparency of our methane emissions disclosures through a variety of approaches, including leading-edge technology to monitor, measure, and mitigate methane emissions.

As quantitative technologies become increasingly accessible, and protocols are developed to reconcile current inventories with actual measurements, we are incorporating field measurement into our emission factor-based inventories. For instance, we use optical gas imaging (OGI) cameras to detect, measure, and address fugitive emissions. We are also testing drones and aircraft-mounted sensors to verify reported methane emissions at selected locations.

SATELLITE-BASED METHANE MONITORING FOR EMISSIONS REDUCTION

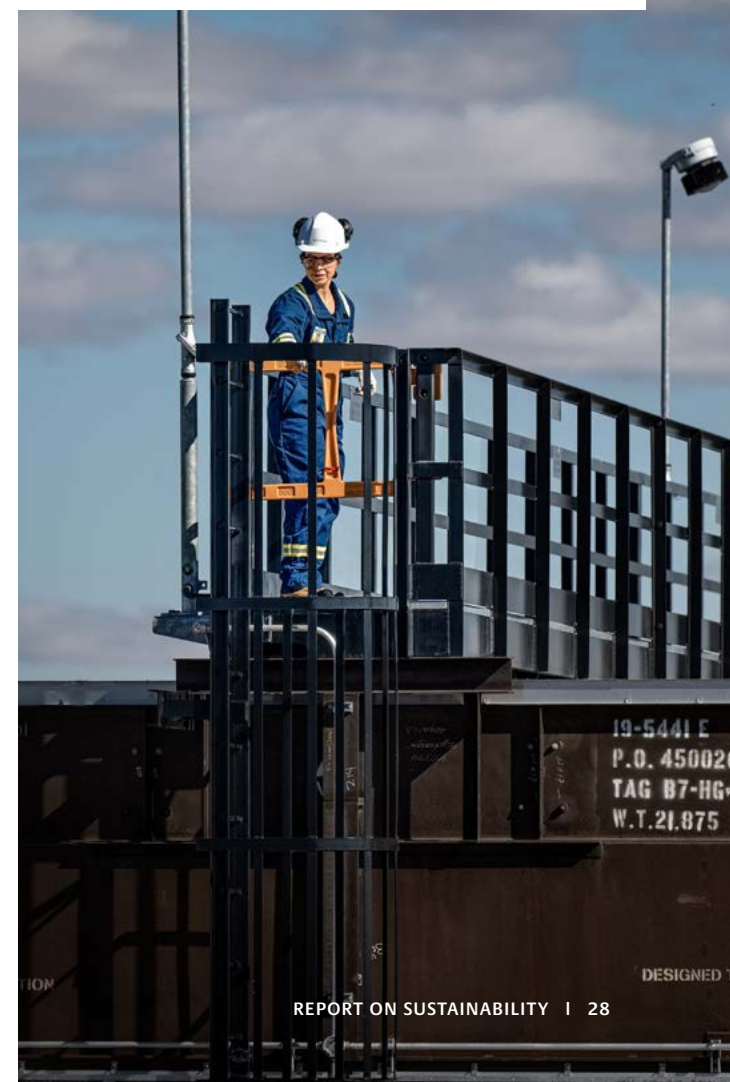
TC Energy has subscribed to GHGSat's satellite methane detection services since late 2022. This service monitors publicly available satellite data on TC Energy's behalf and provides alerts for the detection of plumes of methane. We are in discussions with GHGSat about potential enhancements to their service offerings, including the use of modernized orbital tools that could offer increasingly refined detection thresholds.

WANT TO LEARN MORE?

+ [GHGSat](#)

CONTINUOUS METHANE MONITORING IN TURNER VALLEY

Throughout 2024, the Turner Valley methane continuous monitoring pilot will bring together compressor station emission data points to create a holistic picture of methane emissions. The project aims to improve methane detection and quantification methodologies by integrating continuous monitors with existing operating systems. The pilot will assess new methane detection technologies that will contextualize available operational information streams to support data-driven decision-making.



WHAT ARE WE DOING ABOUT FUGITIVE EMISSIONS?

Fugitive emissions are unintentional releases of methane.

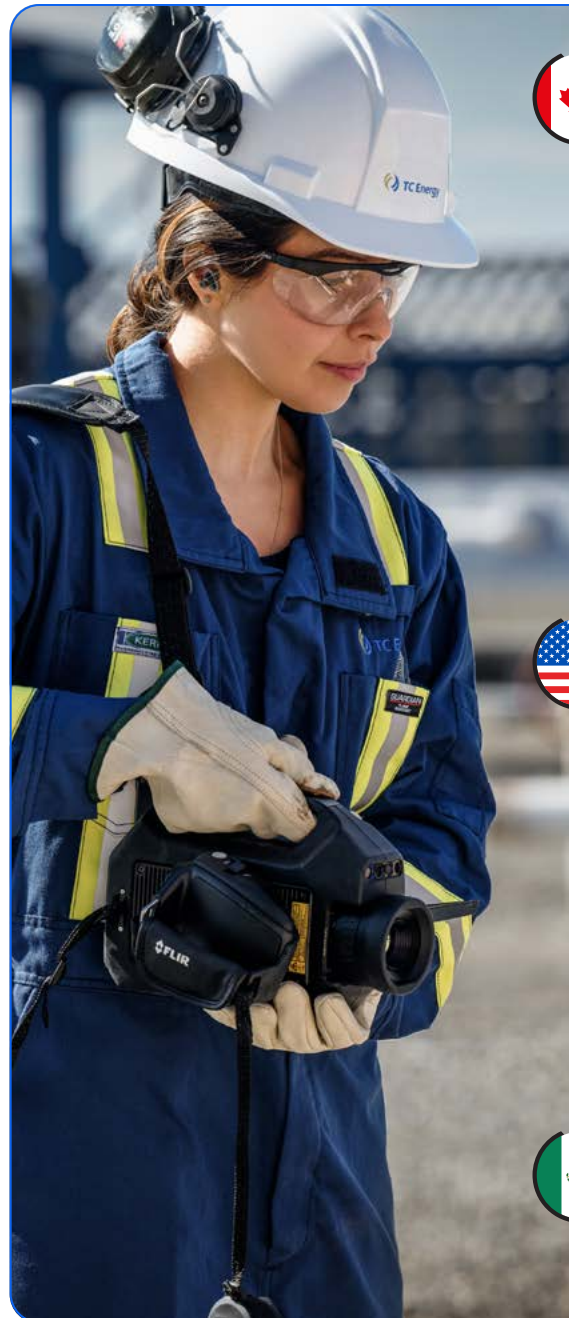
Leak Detection programs on our pipeline assets

TC Energy's Pipeline Integrity Management Program (IMP) utilizes set-frequency aerial flyover leak detection surveys to identify methane leaks from our pipeline assets. In the U.S., we conduct rotary wing aerial surveys every six months across our assets using methane detection technology, identifying potential leaks for further investigation. Similarly, we conduct set-frequency aerial flyovers in Mexico and Canada.

Repairing identified leaks is a priority to control emissions and manage safety and environmental risks. We also have a pipeline blowdown strategy to evaluate and utilize various methane reduction processes, such as capacity drawdown, transfer compression, and more recently, incineration, to further reduce emissions associated with pipeline repairs.

Leak Detection and Repair (LDAR) programs at above-ground facilities

TC Energy implements tailored LDAR programs at our above-ground natural gas pipeline facilities such as compressor stations, meter stations and valve sites, that meet or exceed regulatory requirements. We assess and deploy new practices and technologies to improve the efficiency and effectiveness of our LDAR programs.



In Canada, we employ an alternative Fugitive Emissions Management Program (Alt-FEMP), where we survey for leaks four times a year at compressor stations and annually at meter stations and valves sites, using Optical Gas Imaging (OGI) cameras in accordance with regulations. This recent program has resulted in reductions in both emissions and the kilometres driven by our inspection technicians. Since the enhanced Canadian LDAR program started in 2020, we have abated over 140,000 tonnes of carbon dioxide equivalent (CO₂e) in reported fugitive emissions through expanded use of direct measurement techniques and timely equipment repairs. In 2023, we tested new valves to reduce fugitive emissions where recurrent leaks were identified through the LDAR program.



In our U.S. operations, we complete annual leak surveys at approximately 70 per cent of our compressor stations using a combination of OGI cameras and flow measuring devices. Approximately 20 per cent of our compressor stations are also subject to quarterly monitoring for fugitive methane emissions using OGI cameras, along with repair requirements for identified leaking equipment components. A subset of our compressor stations in New York, California, Maryland and Pennsylvania are also subject to state LDAR programs, where monitoring occurs bi-monthly, quarterly, or annually, depending on state regulation, using EPA Method 21 instruments or OGI cameras.



In our Mexico operations, we complete leak surveys every six months at our compressor stations, meter stations and valve sites in accordance with Mexican regulatory requirements using OGI cameras.



WHAT ARE WE DOING ABOUT VENTED EMISSIONS?

Vented emissions can occur during the normal course of operations and maintenance, as well as in upset or emergency conditions.

TC Energy is taking a multifaceted approach to reduce and eliminate vented emissions.

For decades, TC Energy has led the industry in the use of line-stop equipment that creates a through-pipe-wall isolation point in the pipeline to effectively shorten the length of pipe that needs to be vented for maintenance activities, while simultaneously allowing the majority of that pipeline to remain in-service while work is completed. In recent years, we have piloted, and now implemented, the use of in-line isolation tools that provide the same ability to shorten or limit the section of pipe to be vented, without the need to cut into the pipeline, improving safety, reducing costs and minimizing impacts to project timelines. We have also revisited design practices, finding mechanisms to add isolation points that reduce venting during maintenance and testing of safety-critical equipment.

TC Energy continuously reviews vent mitigation procedures and practices. We supplement our decades-long practice of using pull-down compression to reduce venting with piloting and adoption of new gas recovery and methane destruction tools to incrementally eliminate or reduce the GHG impact of vented gas.

With emissions reduction regulations on the horizon, TC Energy continues to explore avenues to innovate and implement new mitigation tools, including deploying at scale new or more effective versions of recovery and conversion technologies.



Photography submitted by: JAMIE SPROULE

PROGRESS ON MOBILE INCINERATORS, PORTABLE RECOVERY, AND REINJECTION SYSTEMS

TC Energy has previously explored the use of mobile incineration equipment that destroys, rather than vents, residual natural gas released from pipeline maintenance activities like blowdowns. For many years, we have used mobile pull-down compressors to capture or conserve natural gas that must be evacuated for maintenance. Even so, these processes leave a certain amount of residual natural gas in the pipeline. Adopting incineration provides an effective tool to further reduce the emissions impacts of pipeline maintenance activities. The mobile incineration technology pictured here, converts residual methane to carbon dioxide which has a much lower global warming potential.

Having tested and established procedures for the safe use of the high-efficiency destruction equipment, we have now fully adopted the technology as an emission reduction tool within TC Energy's blowdown management strategy and are deploying this mitigation tool on an increasing basis. In 2023, TC Energy reduced blowdown emissions by more than 6,000 tonnes CO₂e by using



incinerators following pipeline pull-down. In 2024, we are targeting the elimination of approximately 15,000 tonnes CO₂e with this incremental abatement tool.

Numerous small-scale and/or low-pressure recompression packages are planned for use in 2024 to supplement the high-flow, high-pressure fleet of transfer compression we currently own and operate. These tools may provide the ability to recapture smaller volumes of natural gas from both pipeline and facility maintenance activities, providing incremental tools to mitigate vented volumes that have historically been difficult to capture.

TC Energy has successfully implemented three compressor dry gas seal reinjection systems in Alberta and Manitoba at the Vetchland, Goodfish, and Spruce compressor stations. These systems capture methane and repurpose it rather than releasing it into the atmosphere, reducing our environmental impact. Together, they prevent release of 1,500 tonnes CO₂e each year. The insights gained from these pilot projects will guide our approach to future abatement opportunities as we continue to modernize our infrastructure and respond to evolving environmental regulations.



IMPLEMENTING ENCLOSED VAPOUR COMBUSTORS TECHNOLOGY

In 2023, we introduced a technology, first tested in 2021 by our CGL Facilities Engineering team, to reduce methane emissions at compressor and meter stations. Enclosed Vapour Combustors (EVCs) will capture and combust natural gas from compressor dry gas seal vents and natural gas-driven pneumatic devices, converting methane into water vapour and carbon dioxide. As we look ahead to the vent elimination and mitigation requirements of proposed new amendments to methane reduction regulations, we will apply learnings from the EVC installations on CGL's facilities to establish best practices for the design, installation and operation of new destruction equipment across our Canadian natural gas assets, where possible.

Partnering with industry peers to reduce methane emissions



Interstate Natural Gas Association of America (INGAA)

TC Energy is a member of the Interstate Natural Gas Association of America (INGAA) coalition of 26 U.S. and Canadian natural gas transmission pipeline companies, collaborating as an industry on policy positions and advocating for federal policies, laws, and regulations that support the development and operation of safe and reliable natural gas transportation and storage infrastructure now and as part of an evolving energy industry.

INGAA's 2023 Climate Report demonstrates the natural gas industry's ongoing work to reduce and eliminate GHG emissions from the transmission and storage sector. Analysis indicates that more than 99.9 per cent of methane transported through INGAA members' assets reached its destination, an improvement of 73 per cent since 2012. In total, INGAA membership represents 1 per cent of all methane emissions in the U.S.



Our Nation's Energy Future Coalition, Inc. (ONE Future)

TC Energy is a member of Our Nation's Energy Future Coalition, Inc. (ONE Future), a group of U.S. energy companies working to reduce methane emissions by identifying policy and technical solutions that manage emissions from production, processing, transmission and distribution.

We committed to the ONE Future 2025 methane intensity goals, which means reducing the methane intensity at our U.S. natural gas transmission and storage operations to 0.301 per cent by 2025. TC Energy's U.S. natural gas pipelines methane intensity remains more than three times lower than the ONE Future sector target.

WANT TO LEARN MORE?

- + View [INGAA's 2023 Climate Report](#)
- + ONE Future's [2023 Methane Emissions Intensity Report](#)

TC Energy has committed to reassess Oil & Gas Methane Partnership 2.0 membership and will publish the outcome of our reassessment in July 2025.

Climate targets

NAVIGATING THE TRADE-OFFS: OUR TARGETS IN A GLOBAL CONTEXT

The pace of our emissions reductions is not occurring fast enough to meet our interim 2030 GHG targets. As a hard-to-abate sector, reducing emissions across TC Energy's vast continental pipeline network poses significant challenges due to the inherent nature of our operations. With emission sources dispersed over a vast geographic footprint, it makes our sector a technologically complex and operationally challenging to abate, particularly for first commercial applications of low-carbon technologies.

The success of our long-term GHG emission reduction plan depends on our ability to meet society's sustainable energy challenge in a financially prudent manner. Despite our ongoing efforts, persistent market headwinds around the cost impact on our customers to reduce emissions, instituting capital discipline to limit annual spending to \$6-7 billion, and rising energy demand have created significant constraints in achieving our 2030 interim GHG target.

Falling short of our 2030 aspirations is not ideal, as these near-term milestones are important waypoints on the journey to our longer-term goal of positioning to achieve net zero emissions from our operations by 2050. As such, we are focusing and prioritizing methane emissions reductions across our operations. By targeting methane as a key lever, we can make meaningful progress while continuing to explore a range of solutions to GHG emissions from our operations. While the challenge ahead is significant, we remain committed to our long-term target of positioning to achieve zero emissions from our operations, on a net basis, by 2050.

TC Energy's work to re-assess our interim GHG emission intensity reduction target continues and we expect to provide an update to our GHG targets in 2025. We are also assessing the major components of our longer-term goal against various criteria, including policy, regulatory, commercial and economic developments, the outcomes of our capital rotation program and the spin-off of our Liquids Pipelines business.



OUR TARGET: Reduce GHG emissions intensity from our operations by 30 per cent by 2030²⁶.

STATUS: Under review. We continue to assess and balance our 2030 emission intensity reduction target and major components of our longer-term reduction plan against various criteria.

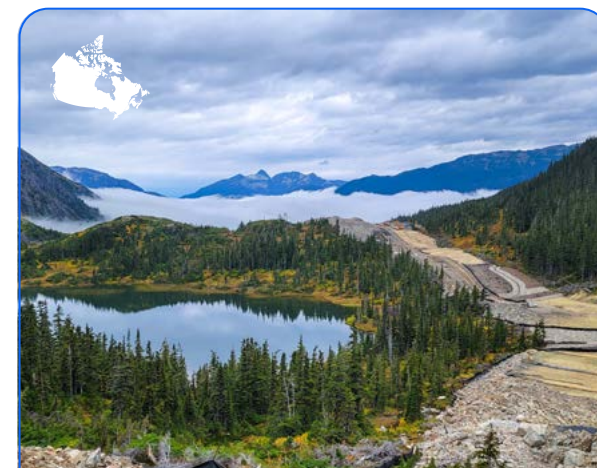
UNDER REVIEW



OUR TARGET: Position to achieve net zero by 2050 from our operations on a net basis²⁶.

STATUS: While challenging, we maintain our commitment of positioning to achieve net zero emissions from our operations, by 2050.

IN PROGRESS



Photography submitted by:
SALMAN CHOUDHRY



Photography submitted by:
MIKE TANG

²⁶ Our targets address Scope 1 and Scope 2 GHG emissions. For planning purposes, target progress is measured relative to a 2019 baseline year, adjusted for material changes in our asset portfolio and quantified on an operational control boundary.



Our GHG emissions reduction plan

Our approach to reducing our GHG emissions focuses on the following five areas:

[WANT TO LEARN MORE?](#)

[+ GHG Emissions Reduction Plan](#)



1 Modernizing our existing systems and assets

New technological advances in valves, fittings and pressurized equipment are enabling us to reduce venting of methane during inspections and maintenance, part of an enhanced equipment maintenance program that will also minimize fugitive emissions more effectively.

Technological leadership in emissions monitoring with Qube

TC Energy invested in Qube Technologies (Qube) in 2024 to support a technology and solution provider in the continuous methane emission detection and quantification ecosystem. Qube's technology is well positioned to support TC Energy's continued efforts in methane detection and measurement. Benefits for infrastructure operators such as TC Energy include real-time detection of methane emissions and improved tracking of leaks over time, including location and volume, identifying priorities for repair. Qube is one of the technologies being deployed at our [Turner Valley continuous monitoring pilot program](#).



2 Decarbonizing our energy consumption

We are exploring how lower-carbon energy sources can support our operations and pipeline assets, such as electrifying our fleet vehicles and installing electric compression at compressor and pumping stations. As the energy transition accelerates, lower-carbon energy is creating new business opportunities with customers and products.

VR and WR Projects

In November and December 2023, the Federal Energy Regulatory Commission (FERC) provided a certificate order approving our VR and WR projects, respectively. These delivery market projects, both with an anticipated in-service date of late 2025, will replace and upgrade certain facilities along the Columbia Gas (VR) and ANR (WR) pipeline systems, while improving reliability. The VR and WR electrification projects will include upgrading compressor stations to hybrid drive horsepower, reducing our Scope 1 emissions.

Virginia Electrification Project

In February 2024, the Virginia Electrification project, an expansion that replaced and upgraded certain facilities through conversion to electric compression, reducing GHG emissions intensity along portions of our Columbia Gas system, was placed in service.



3 Investing in low-carbon energy and infrastructure

We continue to develop and maintain a broad range of low-carbon energy solutions in our diverse portfolio with nuclear, hydrogen and renewable natural gas (RNG) technologies. These projects stretch across our North American footprint.

Bruce Power nuclear investments²⁷

MCR Life-Extension Program

In 2023, the Life-Extension Program at Bruce Power progressed with the Unit 6 Major Component Replacement (MCR) completed and successfully placed in commercial operations ahead of schedule and within budget. Extending the operational life of the Bruce Power units will secure long-term electricity price stability for businesses and families in Ontario.

Project 2030

Along with the MCR life extension program, Bruce Power's Project 2030 has a goal of achieving site peak output of 7,000 megawatts by 2033 in support of climate change targets and future clean energy needs. Project 2030 will focus on continued asset optimization, innovation and leveraging new technology that could include integration with storage and other forms of energy to increase the site peak output.

WANT TO LEARN MORE?

+ [Bruce Power](#)

Pumped hydro storage

Ontario Pumped Storage Project

Along with the Saugeen Ojibway Nation, our prospective partner, we continue to advance the Ontario Pumped Storage Project (OPSP), Canada's largest energy storage facility designed to provide 1,000 megawatts of flexible, clean energy to Ontario's electricity system using a process known as pumped hydro storage. The OPSP remains subject to approval by our Board of Directors and the Saugeen Ojibway Nation. Construction would begin in the latter part of this decade and be in service in the early 2030s, subject to receipt of regulatory and corporate approvals.

WANT TO LEARN MORE?

+ [Proposed Ontario Pumped Storage Project](#)

Canyon Creek Pumped Storage

Using the infrastructure from a decommissioned coal mine, we are developing a pumped hydro storage project that is expected to generate up to 75 megawatts, delivering up to 37 hours of on-demand, flexible, clean energy and ancillary services to the Alberta electricity grid. The project has received the approval of the Alberta Utilities Commission and the required approval of the Government of Alberta for hydro projects under the Dunvegan Hydro Development Act (Alberta).

WANT TO LEARN MORE?

+ [Canyon Creek Pumped Hydro Energy Storage Project](#)

We continue to pursue a portfolio of quality energy solution projects in various stages of development.

Carbon capture: assessing and advancing carbon capture, utilization, and storage projects for transport and sequestration of CO₂ emissions.

WANT TO LEARN MORE?

+ [Alberta Carbon Grid](#)

+ [Media Statement: Project Tundra](#)

+ [Press Release: TVA, TC Energy Invest \\$1.25 Million in Carbon Capture Study](#)

Hydrogen hubs: measured investment in multiple hydrogen production opportunities.

WANT TO LEARN MORE?

+ [Hydrogen Solutions](#)

+ [Hydrogen - Nikola Agreement](#)

+ [Hydrogen - Hyzon Agreement](#)

Renewable energy: investment in sectors and projects that address a growing need for a reliable supply of resources as the energy transition unfolds.

WANT TO LEARN MORE?

+ [Saddlebrook Solar + Storage Project](#)

+ [Factsheet: Saddlebrook Solar + Storage Project](#)

+ [Texas Wind Farms Acquisitions](#)

²⁷ TC Energy has a 48.4% ownership stake in Bruce Power.



4 Driving digital solutions and technologies

TC Energy is working to enhance our data management systems. The increasing complexity and capacity of our system demands greater data availability, granularity and completeness to support our GHG emissions reduction targets. We are working to unify emissions data in a streamlined company-wide repository to reduce the time from data generation to utilization, improving data availability. Additionally, we are developing and deploying software and systems to digitize our operations, including emissions monitoring, system automation, artificial intelligence (AI), and machine learning.

Reducing emissions with algorithms

Using more powerful and faster data analysis tools and genetic algorithms, our team partnered with Nova Research to develop an algorithm that determines short-term system capacity and minimizes fuel consumption, reducing GHG emissions and improving pipeline capacity. Although initially implemented virtually on our NGTL System, the technology will have broad application across many of TC Energy's natural gas assets.



5 Leveraging carbon offsets and credits

TC Energy is investing in a diversified portfolio of abatement activities and is carefully considering carbon offsets as a complementary climate solution.

Our participation in the Voluntary Carbon Market will be guided by principles to help us identify and assess opportunities that improve the livelihoods of local communities, benefit the natural environment, and compensate for emissions that are hard to abate:

- **Think global, prioritize local:** select, where possible, projects that maximize the socio-economic and environmental benefits for our company and the communities in which we operate.
- **Focus on quality:** invest in durable offsets that are verified by internationally recognized standards (e.g., Verra and Gold Standard) and validated by independent third-party experts.
- **Bring others along with us:** find carbon offset opportunities that not only support our climate ambitions but also those of our customers and partners.
- **Listen and learn:** engage with subject matter experts and other recognized leaders in the carbon-market space to help build a robust strategy and deep expertise around carbon offsets.

We believe that carbon offsets will play an important role in removing atmospheric carbon and reducing emissions globally. We will continue to assess how we can best contribute to building and scaling voluntary carbon markets.



Photography submitted by: **JEFFERY ROGERS**



Photography submitted by: **JAMES OLSON**



OPERATIONAL MANAGEMENT



TC Energy's natural gas pipeline network delivers energy safely, responsibly and reliably across North America. Throughout the lifecycle of our assets, we use robust asset integrity programs to maintain and optimize pipeline performance and minimize environmental impact and make substantive investment in new ways to design, construct, monitor and inspect pipelines.

Asset integrity and resilience

Improving the performance of our assets, making them safer and more efficient, signals our dedication to pipeline safety and reliability. TC Energy continues to push boundaries, exploring new and maturing technologies to boost our ability to monitor pipelines and facilities to maintain the safety of the public and our employees.

OPTIMIZING PIPELINE MAINTENANCE THROUGH DATA CONSOLIDATION

With over 98,000 km of pipelines to care for, TC Energy assesses new technology regularly to diversify its in-line inspection (ILI) and non-destructive examination (NDE) technologies and advance crack and corrosion management. In 2023, we launched Operations 360 (O360), our data lake project, with partners Amazon Web Services (AWS) and Pariveda Solutions. The project consolidates data from over 70 sources at a petabyte scale, helping plan pipeline maintenance more efficiently, while minimizing disruption to local communities. We have identified immediate savings of \$1.6 million as the project develops across the organization.

IN-LINE INSPECTION TECHNOLOGY ADVANCES SAFETY

TC Energy is dedicated to improving pipeline safety and reliability. One way we can achieve this is through partnerships with ILI service providers to develop pipeline crack technologies that accelerate and improve data collection and analysis. TC Energy supported the validation of a new axially-oriented magnetic flux leakage technology — an award-winning, ILI technology that detects and measures circumferential stress corrosion cracking with high precision, analyzing up to 2,000 samples per square inch.

This expands the suite of tools TC Energy uses to inspect our pipeline system and assess integrity. Improving the performance of these technologies enables our programs to optimize decisions. As part of TC Energy's technology development process, we share integrity dig results and SME expertise following testing to support further refinements. In 2023, TC Energy completed eight inspections with the technology, helping to detect, identify, and estimate severe circumferential stress corrosion cracking. In 2024, there are nine additional inspections planned to further test the technology.

THE NEXT PHASE IN PIPELINE WELD INTEGRITY

Variations in material properties, complex calibration, and the need for highly experienced personnel to perform tasks and analysis have been obstacles to ultrasonic testing of pipeline weld integrity. TC Energy has partnered with Allseas to pilot the Dolphin AUT (automated ultrasonic weld testing) system, a state-of-the-art ultrasonic array, girth weld inspection system, on our Southeast Gateway Pipeline Project. In 2023, we conducted extensive validation tests to verify the performance and qualify the AUT solution for use. In December 2023, TC Energy became the first large-scale commercial implementer of Dolphin AUT systems, leveraging its data sorting and processing capabilities, and ultrasonic technology.

WANT TO LEARN MORE?

- + [Fact sheet: asset integrity \(Canada\)](#)
- + [Fact sheet: asset integrity \(U.S.\)](#)





Emergency preparedness and response

Safety is foundational to what we do. We invest time and resources on hazard identification, risk assessments, training programs, emergency exercises and public awareness to support the safety of our employees, contractors, the public and the environment. And we engage regularly with emergency responders across our operating footprint to establish a safe, effective and collaborative response to any potential incident on or near our assets.

SAFETY STARTS WITH PLANNING

Our emergency response plans prepare our teams to act quickly and effectively in an emergency to reduce impacts. Everything we do is guided by regulatory and legislative requirements. We also consider the needs of our business, our workforce and the broader community. In the rare case that an incident occurs, our comprehensive environmental remediation program applies leading-edge technologies and techniques.

[WANT TO LEARN MORE?](#)

+ [TC Energy Response](#)

USING AI TO HELP PREPARE FOR EMERGENCIES

We are developing and deploying software and systems, including system automation and AI, to digitize our operations and monitor emissions. Our machine learning application evaluates millions of potential scenarios and predicts operational outcomes for our U.S. natural gas pipeline operators by collecting critical real-time data from pipeline sensors and systems.

We have also developed and launched an operational business intelligence program that uses AI and machine learning to detect and predict anomalies on our Canadian natural gas pipeline system faster and more efficiently than current computer systems. We are now completing studies to roll out this technology to other assets.

[WANT TO LEARN MORE?](#)

+ [Fact sheet: emergency preparedness and response](#)



OUR TARGET: Zero significant process safety incidents²⁸.

STATUS: We had one significant process safety incident in 2023 and are committed to our target of zero significant process safety incidents. We develop and refine our process safety and risk processes in collaboration with our stakeholders. We are committed to improving process safety throughout the lifecycle of our assets through project design, project execution and operations. We use various technical studies, risk consequence modeling and learnings from incidents to improve our understanding of hazards and risks.

Guided by CSA Z260, a pipeline system-wide standard, we voluntarily report Tier 1 and Tier 2 process safety incidents. Our annual target focuses on significant process safety incidents, which are not widely reported by our peers.



2023 Emergency preparedness highlights

213

TOTAL EXERCISES COMPLETED (#)

16

ANNUAL FIELD EXERCISES

188

TABLETOP EXERCISES

4

EQUIPMENT DEPLOYMENT EXERCISES

5

ADDITIONAL EXERCISES

2,061

FIRST RESPONDER TRAINING (#)

2,769

INCIDENT COMMAND SYSTEM TRAINING (#)

²⁸ Significant process safety incidents are defined by TC Energy as unplanned or uncontrolled spills or releases that result in major consequences to people or the environment. They are a subset of Tier 1 process safety incidents. In evaluating the severity of the incident, we also consider the potential risk of legal, financial or reputational impacts to our company. Further information is provided in the [Appendix: Performance data](#).



SPILL RECOVERY COMPLETED AT MILEPOST 14 INCIDENT IN WASHINGTON COUNTY, KS

In June 2023, TC Energy completed the recovery of the 12,937 barrels of crude oil released from the Keystone Pipeline²⁹ at Milepost 14 in Washington County, Kansas. By October 2023, we were able to return the flow of Mill Creek to its natural state after approval by the U.S. Army Corps. We maintain our commitment to long-term reclamation and environmental monitoring activities. To date, we have committed 3,000 people to the remediation of Mill Creek and the surrounding area. We will maintain a presence at site to progress long-term reclamation activities and environmental monitoring in line with our commitment to full reclamation of the land.

THIRD-PARTY ROOT CAUSE FAILURE ANALYSIS AT MILEPOST 14

The PHMSA's Amended Corrective Action Order mandated a Root Cause Failure Analysis (RCFA) by an independent third party. The RCFA, issued April 2023, revealed unique circumstances at the rupture location, which originated during construction. The primary cause was identified as a fatigue crack at a girth weld. Comprehensive remedial work, in line with the RCFA recommendations, is in progress.

[WANT TO LEARN MORE?](#)
[+ Milepost 14 incident page](#)

RESPONSE TO VIRGINIA INCIDENT

On July 25, 2023, a natural gas pipeline rupture on Columbia Gas occurred alongside Interstate 81 in Strasburg, Virginia. Emergency response procedures were enacted and the segment of impacted pipeline was isolated shortly thereafter, thus minimizing the environmental impact of brushfires. There were no reported injuries involved with this incident and no significant damage to surrounding structures. The pipeline has been operating at reduced pressure in accordance with PHMSA's Corrective Action Order (CAO) since July 28, 2023 and we are working with PHMSA under the CAO to return the system to normal operations as soon as possible.

[WANT TO LEARN MORE?](#)
[+ Virginia incident page](#)

²⁹ The pipeline is operating within certain pressure restrictions, subject to an Amended Corrective Action Order (ACAO) issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) in March 2023. We expect to continue to fulfill our Keystone contract commitments within the terms of the order.



ENVIRONMENTAL MANAGEMENT



We recognize that land has cultural and ecological significance in addition to its economic value. TC Energy's dedicated team of environmental professionals is committed to stewardship of the land we share with people and wildlife. Engagement, protection and performance guide us as we build, maintain and operate energy infrastructure. From our initial stakeholder and rightsholder engagements on project planning and design, through construction and operations, to the day we decommission and reclaim the land, we are committed to protecting the environment.

PROACTIVE MAINTENANCE AND MONITORING

We take an evidence-based, collaborative approach, listening to Indigenous, landowner and stakeholder voices through public awareness programs, working with local communities and experts to assess site-specific impacts and create tailored operating procedures, training, and inspection cycles, including aerial and ground patrols. We create tailored operating procedures, employee training, and inspection and audit cycles that match the needs of the site, including aerial and ground patrols checking for pipeline leaks. These programs, coupled with our public awareness program, help minimize impacts on stream and wetland ecosystems, wildlife habitat, cultural resources and the human environment.

EXPLORING THE FOUR PILLARS OF TNFD

The Taskforce on Nature-related Financial Disclosures (TNFD) was launched in 2021 to provide a global framework for companies to assess, disclose and mitigate their nature-related risks and impacts. The TNFD aims to drive more consistent and comparable reporting and, ultimately, shift the flow of global capital towards nature-positive activities and outcomes.

The TNFD recommendations include guidance for companies reporting on evolving nature-related issues structured around the four pillars of governance, strategy, risk and impact management and metrics and targets. In 2023, TC Energy completed a pilot of the TNFD framework to support the development of an approach to disclosure of nature-related dependencies, impacts, risks and opportunities. As a TNFD Forum member, we provided our perspectives on the use of available data to support development of nature-related measurements and we suggested expanding sector-specific guidance to include the midstream sector.

We recognize that nature-based reporting is less mature than climate-based disclosures and will require time and investment to contribute to greater knowledge and development of consistent measurement methods. We continue to explore opportunities to contribute to nature-positive solutions.

[WANT TO LEARN MORE?](#)

[+ Environmental Principles](#)



Photography submitted by:
LAURA MACNEIL



Photography submitted by:
DANA CHARLTON



Air quality

Action on air quality



Identify and maintain records of air quality emission sources across our asset network.



Monitor, record and report emissions in compliance with federal, state, provincial and local regulations.



Provide training around air quality standards and operational best practices to relevant employees.

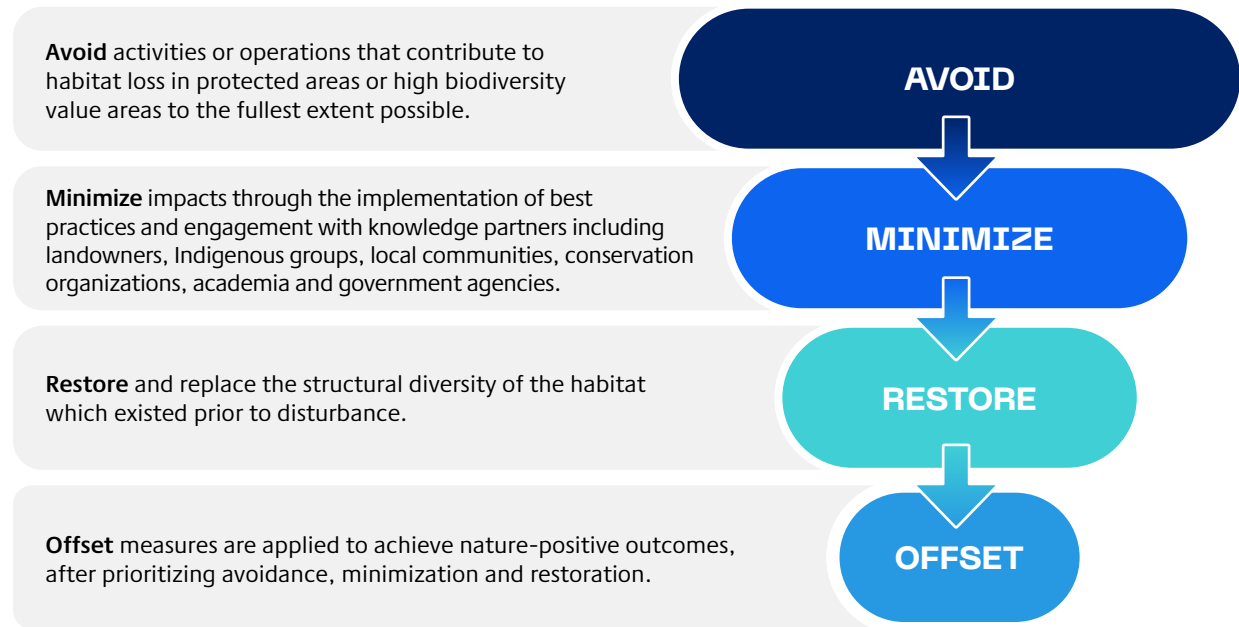
We monitor and manage our air quality emissions and cooperate fully with the federal, state, provincial and local environmental statutes and regulations covering air quality in each jurisdiction. Our methods for preventing, minimizing or mitigating air emissions include implementing operational best practices and controls, maximizing operational efficiency and monitoring compliance with applicable laws and regulations.

Ecological impacts

MANAGING OUR FOOTPRINT

When we identify a sensitive habitat or an area of high biodiversity, we make that location a priority and avoid it where possible. This is the first step in our Biodiversity Mitigation Hierarchy. If we can't work around a priority area, we design a construction framework to minimize disturbance. Once work is completed, we stabilize the soil and topography before re-vegetation begins, using seed mixes approved by appropriate land management agencies or landowners. Since natural growth takes time, we regularly visit the site to check on progress. Our goal is to return the land to the condition we found it or better, which may mean enhancing or restoring wildlife habitat. If full restoration is not possible, we consider an offset to compensate for the lost values.

BIODIVERSITY MITIGATION HIERARCHY



HOW AND WHY WE MONITOR BIODIVERSITY

North America has a rich and biodiverse landscape of mountains, forests, native prairie, wetlands, river valleys, and farmland. Due to our scale, we span almost all of it. We are constantly reminded of the possibility of habitat loss and strive to mitigate and minimize our impacts through adoption of best practices and comprehensive environmental management systems.

Having clear metrics and targets for our commitments is essential to our performance-based management. We align our efforts with global, market-led standards and frameworks to report on biodiversity and climate change. Biodiversity-related metrics are reported in alignment with the SASB Oil & Gas Midstream Standard, and we are evaluating new frameworks and guidance including the UN Convention on Biological Diversity (CBD), GRI Biodiversity Standard and the Kunming-Montréal Global Biodiversity Framework (GBF).

In addition, joining the TNFD Forum continues to advance our knowledge and expertise in reporting and acting on nature-related risks, impacts and dependencies.



Photography submitted by:
JOE ZAPPITELLI



Progress on pollinators

TC Energy funded the Northwestern Polytechnic and National Bee Diagnostic Centre to monitor native pollinator populations along our pipeline corridors. This study is helping scientists to better understand bee species in northern Alberta by collecting and sharing data on local biodiversity through site assessments and utilizing environmental DNA (eDNA) detection. The study has contributed to provincial and global monitoring efforts.

TC Energy is working with over 40 multi-sector organizations to conserve millions of acres of habitat for the monarch butterfly in 48 U.S. states. In 2023, we applied for voluntary inclusion of select TC Energy right-of-way lands in the Monarch Butterfly Candidate Conservation Agreement with Assurances (CCA). The CCA is a habitat conservation effort to protect the monarch butterfly, an important pollinator in North America. If successful, enrollment in this agreement would provide over 300 acres of land for pollinator habitat.

To combat a decline in honey production in the municipality of Ahome, we worked with communities along the right-of-way of our Topolobampo pipeline to acquire 500 queen bees to help create new hives.

WANT TO LEARN MORE?

+ [Safeguarding Biodiversity: Our approach](#)

+ [Fact sheet: Reducing our environmental footprint](#)

+ [Kunming-Montréal Global Biodiversity Framework](#)



Land restoration

TC Energy has been restoring land for over 70 years, returning thousands of acres to their natural state after pipeline and facility construction is complete. Nature takes over quickly; plants bloom and wildlife returns. In part, that's due to our approach to land restoration, avoiding areas where sensitive species grow whenever possible, keeping a close eye on wildlife interactions during construction, and even delaying work while wildlife is migrating or nesting. We plan ahead, working with Indigenous knowledge holders, landowners and community leaders to design and implement construction methods that have minimal impact on habitats to make restoration efforts more successful.



OUR TARGET: Restore or offset all land disturbances resulting from construction and operation of our North American assets³⁰.

STATUS: In 2023, we achieved 99 per cent restoration of disturbances. We were not able to restore the remaining one per cent due to additional repair work required in localized sites because of access, challenging terrain and weather conditions. Some projects where repairs were completed in the preceding growing season warrant additional monitoring beyond the five-year period to verify success of the mitigation. These sites will be restored when conditions permit and we will continue engagement with landowners until restoration is achieved.



RESTORATION ACROSS NORTH AMERICA

In Canada, we offset impacts to wetlands within the boreal and foothills region in Alberta through compensation and replanting efforts, replanting approximately 2,400 trees in an area that is almost double the size of the impacted site.

We provided nearly US\$4 million to organizations and agencies in the U.S. to offset impacts from our work. This included wetland and waterbody compensation, as well as mitigation for impacts to Northern Long-eared bat and Indiana bat habitat because of project construction. Following the Milepost 14 incident, we planted approximately 800 trees, 4,600 shrubs, and 15,000 willow stakes. The planting events were scheduled at recommended seasons to maximize survival of new vegetation. Altogether, we have replanted 12 acres along Mill Creek within the incident area.

In 2023, approximately 16,904 native plant species were planted across 47 acres of tropical habitat, contributing to reforestation efforts on the Tuxpan-Tula pipeline.



CARING FOR NATURE BEGINS EARLY

Land and ecosystem disturbance is inevitable when TC Energy undertakes major capital projects, but we seek ways to minimize the scope and duration of our impact. In the development stages, long before we start work, we systematically assess the interaction of construction and operations with terrestrial and aquatic habitats, developing protection and restoration plans project by project, often with stakeholder and rightsholder input. We are especially sensitive to natural resources — such as plant, wildlife and waterways — that are sacred to Indigenous peoples. We consult for the duration of our work with knowledge holders to seek the best way forward.



³⁰ Restoration activities are multi-year efforts with end-of-activity targets rather than annual targets. Further information is provided in the [Appendix: Performance data](#).



TC ENERGY

BIODIVERSITY PROTECTION ON THE SOUTHEAST GATEWAY PIPELINE (SGP) PROJECT

In 2023, TC Energy took additional steps to protect the environment during the expansion of Southeast Gateway in Mexico.

- Pre-construction wildlife rescue and relocation:** Before construction began, we conducted systematic tours to rescue and relocate fauna that might not be able to move quickly. Elsewhere, we deterred wildlife from worksites for their safety.
- Rescue operations and scientific collaboration:** Between April and August 2023, we rescued animals from 68 species of crustacean, insect, arthropod, mammal, bird, amphibian and reptile as a result of a comprehensive operation across Tuxpan and Coatzacoalcos in Veracruz and Paraíso in Tabasco. A total of 981 animals were rescued and 91 were deterred from entering the work area. Among the relocated and deterred species, 27 are listed under federally regulated environmental protection standards, with two species in danger of extinction, 11 threatened, and 14 under special protection. Notably, 789 of the 981 animals were crustaceans, which our teams protected during the rainy season when they migrate for spawning. We continue our collaboration with scientists from the University of Veracruz and the Institute of Ecology to discuss potential environmental and social challenges along the route and to share data about design and construction of the Southeast Gateway pipeline, specifically near watersheds and estuaries, reefs and coastal areas.
- Turtle rescue:** Our SGP teams volunteered on Sea Turtle Day in Tuxpan. Team members helped return mother turtles to the sea along the coastline in northeast Veracruz in an effort to preserve an endangered species and learn more about local marine life.

 [WANT TO LEARN MORE?](#)

+ [Environmental protection on the Southeast Gateway Project](#)



Photography submitted by:
ZOITZA MARTINEZ



Photography submitted by:
ROGELIO PAEZ



Waste

TC Energy's capital projects and operations generate small amounts of hazardous waste in the form of recyclable hydrocarbons from our storage systems, recovered oily liquids from the natural gas in our gas pipelines or used lube oils and glycols from turbines, pumps and engines. When we can't recycle or recover it, waste is processed at licensed, secure disposal facilities in accordance with applicable laws and regulations. The teams who undertake clean-up, treatment, storage and disposal of hazardous substances are given specific mandatory training and stage emergency response exercises.

Water

Our commitment to efficient operations includes managing our water consumption and discharge responsibly. Most of our water consumption is at our cogeneration power assets, where water is converted to steam for the generation of electricity. Residual steam is either sold, recycled or treated prior to discharge.

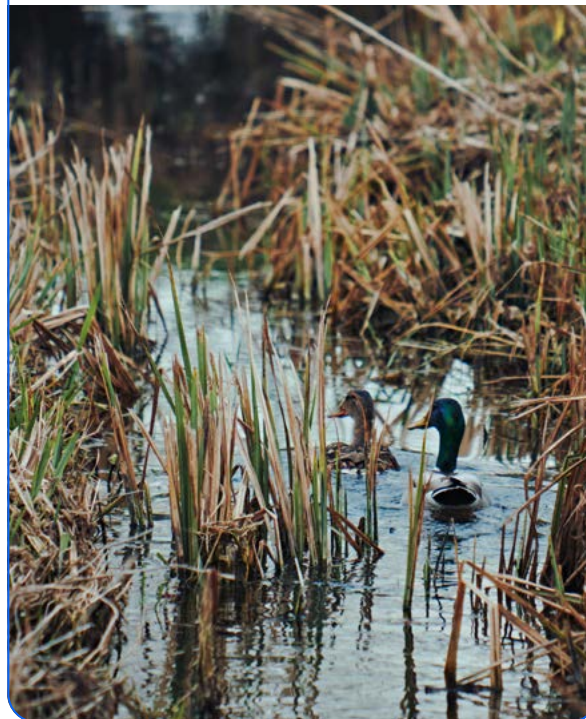
Recognizing the importance of water to ecosystems and communities alike, we comply with applicable regulatory standards, environmental laws and permitting requirements. We evaluate a proposed facility or pipeline to understand the nature and extent of potential interactions with fish and fish habitat, vegetation, wetlands, hydrology, and water quality and quantity.

When planning a new pipeline, we conduct site-specific assessments on waterways and wetlands along a proposed route. We take the least disruptive option based on these assessments, regulatory requirements, industry best practices, constructability and economic feasibility. One of the most important decisions is to determine the pipeline construction method, including crossing locations and possible trenchless installations. Environmental assessments include water flow, bank stability and the quantity and quality of fish habitat, wildlife and vegetation.



Biodiversity mapping and assessment at Rivière-aux-Pins Marsh Restoration Project, Ducks Unlimited Canada

TC Energy funded the development of a biodiversity mapping and assessment tool to investigate more than two million observations of species conservation outcomes. The tool was also used in a restoration project to create a fishway on one of the last high-potential spawning grounds in the St. Lawrence River and to upgrade existing water level controls in the marsh.



HYDROSTATIC TESTING WITH MINIMAL WATER WASTE

We use water sparingly in our pipeline operations, primarily for the purpose of hydrostatic testing of pipeline integrity during commissioning or maintenance. The water for the test is drawn from nearby natural or municipal sources in accordance with applicable permits and regulatory requirements. Prior to disposal, the water is filtered and sampled to verify it meets the permitted water quality requirements and standards, whether federal, provincial, or state. The used water is then typically returned to the land near the original watershed source.

[WANT TO LEARN MORE?](#)

+ [Fact sheet: hydrostatic testing](#)

Environmentally focused community giving

We recognize the importance of protecting and enhancing the environment, especially projects that look to conserve, maintain and encourage land capability, promote biodiversity, preserve important habitats and protect species at risk. That is why we have made a commitment to support environmentally focused social impact partnerships as part of our overall Social Impact program. To enable us to evaluate the impact of these efforts, we require the organizations to explain how our funding might impact their local area and how they will report outcomes if a grant is awarded.

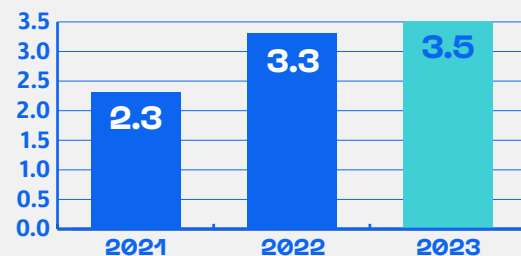


OUR TARGET: Invest \$10 million to support environmentally focused social impact partnerships by end of 2025.

STATUS: In 2023 we contributed over \$3.5 million to environmental causes across North America, positioning us to meet our \$10 million target by the end of 2025.



Environmentally-focused community investment (\$M)



Native Alberta trout studies in Canada

TC Energy and Triton Environmental Consultants Ltd. joined other partners to conduct sampling studies for bull trout in critical habitats affected by TC Energy's assets. Funding will allow for better understanding of the distribution of Species at Risk and may influence future species management and regulatory decisions.



U.S. woodlands conservation

TC Energy donated to Woodlands Preserve in Louisiana for assessment and restoration of forested wetlands, which can absorb 32 million gallons of water annually, reducing flooding in nearby communities. It also provides a habitat for native wildlife and migratory birds, with over 160 bird species recorded since 2004.



Coral reef rehabilitation in Mexico

In partnership with [Oceanus A.C.](#), TC Energy is contributing to the rehabilitation of coral reef sites in the state of Veracruz. This initiative aims to transplant 1,500 coral colonies on the Isla Lobos Reef. Increasing healthy coral colonies allows reef sites to begin their restoration process. The initiative will include maintenance and monitoring of the restoration sites, as well as education programs for TC Energy and local employees.



SOCIAL



IN THIS SECTION

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- 70** Human rights
- 71** Responsible procurement

It is a privilege for us to work closely with many diverse and unique communities across North America. With that privilege comes a responsibility to do our best for those communities and the people who live there. We begin with our own workplace, where employees are empowered to prioritize wellbeing, health and safety.

Our work also connects us to the lives and livelihoods of stakeholders and rightsholders who have knowledge and insight that we value. Beyond our core business, we are making investments to build resilient communities, support diverse local businesses, attract and retain talented individuals, and create value alongside Indigenous peoples and groups.



SOCIAL COMMITMENTS



Continuous safety improvement

Continuously improve our systems to protect people and consistently demonstrate safety as our number one value

Combined Total Recordable Case Rate (TRCR) pg 49

Combined High Energy Serious Injury and Fatality rate pg 49



Fostering enduring, mutually beneficial relationships with Indigenous groups

Be the partner of choice for Indigenous groups

Community-led reconciliation initiatives pg 69

External Indigenous Business Advisory Council pg 67

External Indigenous business group pg 67



Focus on mental health

Demonstrate actions enhancing employee psychological safety and emotional wellbeing

Mental health awareness pg 57



Fostering mutually beneficial relationships

Promote wellbeing for our communities and maintain mutually beneficial external relationships

Social impact employee participation pg 65

Social impact investments pg 59



Furthering inclusion and diversity

Strengthen collaboration and performance by promoting inclusion and diversity across our organization and supply chain

Diversity on Board of Directors pg 80

Women in leadership pg 51

Women and female-identifying individual workforce representation pg 51

Visible minorities in leadership pg 51

Diverse supplier spending pg 72



WORKFORCE

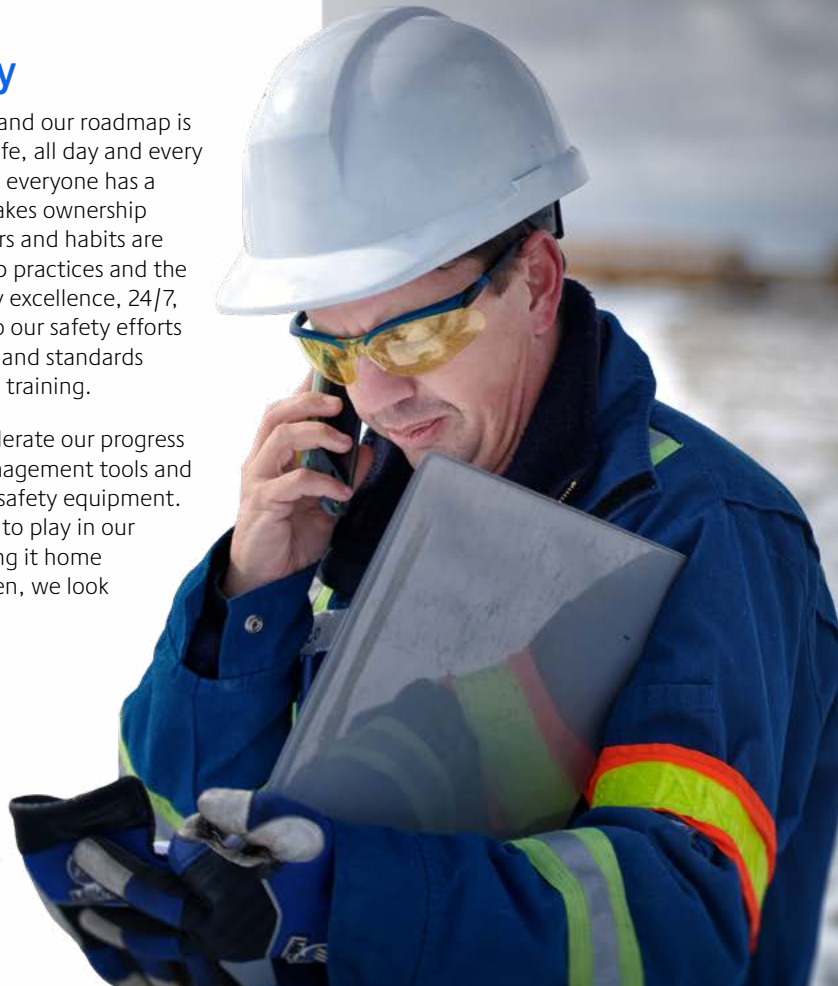


TC Energy believes that high-performing people drive high performance business results. We prioritize and invest in our employees' personal wellbeing and professional development to create a positive, respectful, professional, inclusive and rewarding workplace.

Employee and contractor safety

Safety is our number one value and our roadmap is clear: keep people and assets safe, all day and every day, reinforcing a culture where everyone has a safety-conscious mindset and takes ownership of safety. Our culture, behaviours and habits are shaped by reinforcing leadership practices and the genuine desire to achieve safety excellence, 24/7, 365 days a year. Foundational to our safety efforts is continual review of processes and standards alongside practical and rigorous training.

In 2023, we took action to accelerate our progress on new safety frameworks, management tools and communications, and personal safety equipment. We recognize we all have a role to play in our commitment to everyone making it home safely. When that doesn't happen, we look long and hard at our processes.



The Safety Roadmap

Enhancing operational discipline

In 2022, TC Energy undertook a thorough review of our safety culture. As a result, in 2023 we launched a three-year roadmap with a renewed mandate to address systemic issues. The roadmap is directed to three key themes — leadership, management systems and operational discipline. So far, we have seen progress across five areas:

High-Energy Based Safety Training to increase awareness among leaders and frontline workers of high-energy hazards to prevent serious injuries and fatalities (SIF). We're developing new risk and hazard assessment processes and tools for 2024.

New Safety Event Management system to gather better data, and to share and apply learnings.

Transforming our management system including launching our renewed [TC Energy Operational Management System \(TOMS\)](#) to reduce complexity and simplify requirements for greater consistency and relevance across all our businesses.

Safety recognition program for people who stand up for safety in their day-to-day work to encourage proactive safety from the field to the office.

Reinforced **Human and Organizational Performance (HOP) principles**, increasing psychological safety, empowering workers to speak up about hazards and stop work if necessary.



OUR TARGET: Combined (employee and contractor) total recordable case rate (TRCR): 0.5 in 2023

STATUS: In 2023, we did not meet our target of 0.5. While we achieved a 31 per cent decrease in recordable injuries from the previous year, we know we can do better. We implemented a new Safety Event Management system that will help us better gather data and share learnings and we launched our new TC Energy Operational Management System (TOMS) framework – simplifying requirements to improve consistency and relevance across all our businesses.

SAD LOSS OF LIFE RE-EMPHASIZES OUR FOCUS ON SAFETY

2023 was marked with an unacceptable loss: In September 2023, an operational aerial patrol in Mexico resulted in the loss of four lives. It is critical that we learn from these incidents by conducting a thorough investigation and implementing direct actions to address any systemic issues.

As we assess the results of the Mexico aviation incident investigation, we continue to offer access to support services and resources to family and colleagues of those who lost their lives. We are also working to improve how we measure our effectiveness in preventing Serious Injury and Fatality (SIF) incidents.

NEW METRIC & TARGET

METRIC: Strengthen our focus and commitment on the prevention of major accidents and serious incidents.

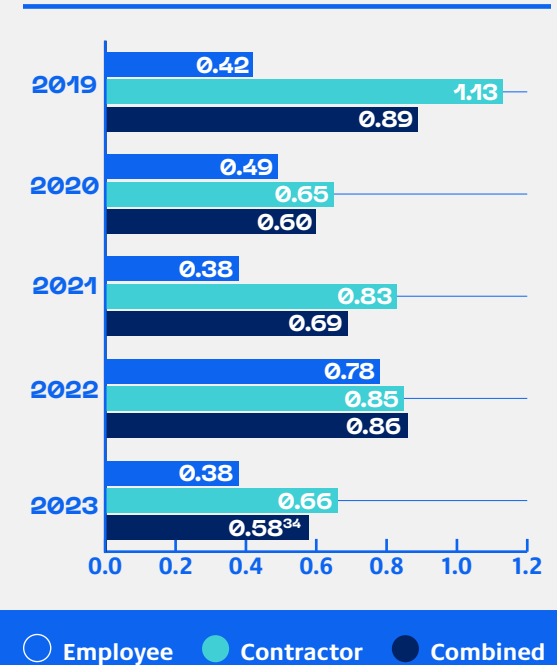
TARGET: Combined (Employee and Contractor) High-Energy Serious Injury and Fatality³¹ rate: not to exceed 25 per 100 million hours³² in 2024

By increasing the visibility of High-Energy Serious Injury and Fatalities (HSIF), we can better identify, assess and address the impact or importance of each incident. This approach encourages learning and drives improved safety performance across our operations.

SOS alarm response for remote working

TC Energy has introduced wearable safety alarms to help protect employees who are required to work alone in the field. These small devices are not only portable gas detection monitors but can also generate an immediate SOS alarm response, alerting our security operations team. Each device transmits data on falls, immobilization, vehicle safety detection and multi-gas monitoring. We anticipate spending over \$9 million and deploying approximately 1,800 devices by end of 2024.

Total Recordable Case Rate³³ (recordable cases per 200,000 hours worked)



³¹ 'High-energy' defined as an element of work that involves more than 500 ft-lbs. of physical energy. 'Serious injury' defined as a life-threatening and life-altering incident.

³² Target based on annual rate of high energy serious injuries and fatalities per 100 million hours, as of December 31, as adapted from Construction Safety Research Alliance (CRSA) serious injury and fatality rate calculation methodology. Internally, we use a 12 month rolling rate to identify changes in the pace or direction trends.

³³ Consistent with industry best practice, TC Energy defines total recordable case rate as the number of recordable cases related to a common exposure base of 200,000 hours (100 full-time employees). Recordable cases are all work-related deaths and illnesses and those work-related injuries that result in a loss of consciousness, restriction of work or motion, transfer to another job or require medical treatment beyond first aid.

³⁴ For the purposes of internal reporting and tracking, TC Energy utilizes a quantification methodology that differs from that for external compliance and regulatory reporting. TC Energy's 2023 internally-quantified combined employee and contractor recordable case rate was 0.50.



A LEARNING MINDSET WITH HOP PRINCIPLES

TC Energy is embracing the Human and Organizational Performance (HOP) philosophy on a journey towards a learning mindset for every employee. We recognize that in high-risk industries, problems flow from systemic issues, not individual errors. Learning from our workforce experiences are integral to finding solutions to even the biggest problems. HOP challenges the historical status quo in managing people to reveal truths about human behaviour and system design that have been hidden in the operational world. Taking a fresh perspective helps TC Energy navigate negative behaviours and create resilience in a complex system.

UNDERSTANDING HOP PRINCIPLES

- Mistakes happen – and when they do, we try to understand why not who. We choose to leverage our people’s expertise to continuously improve our systems and build safeguards that enable us to fail safely.
- Blame stops improvement, hinders learning and breeds a culture of fear and unsafe conditions. We choose to learn from those closest to the work. We ask what failed not who failed, and we question without blame. We can then work together to create safe solutions.
- Circumstance, emotions and experiences influence our actions, behaviours and decisions. We choose to identify and understand the conditions that lead to certain behaviours, actions and decisions. We listen in order to make improvements.
- Adopting a learning mindset to understand how our people interact with systems during everyday work enables the co-creation of solutions.
- We choose to learn deliberately, then share and apply learnings to create a safe workplace that enables early detection of problems. We have meaningful conversations about hazards, risks and safety challenges.
- Responding negatively to bad news can get in the way of a valuable learning opportunity. Instead, we choose to respond positively by thanking colleagues for their courage. We seek to build trust through curious intention and input and to listen to create a safe space without fear of shame or retaliation.



DRONES MAKE FIELD INSPECTIONS SAFER

Drone technology enables access to work sites that would otherwise be inaccessible or unsafe. In 2023, TC Energy conducted tests at our Cushing Tank Terminal utilizing drones equipped with ultrasonic capabilities. The results demonstrated that drone-based inspections can effectively reduce risk and enhance worker safety. Additionally, the drone inspections decreased the cost and time required to complete inspection activities on in-service tanks, as well as external and internal examinations of out-of-service tanks, pressure vessels, towers, flares, pipes, and structural components. Drone-based inspections are considered for situations that pose a safety risk for employees, such as hard-to-reach areas, equipment and structures located at heights, and those within confined and hazardous spaces.



Employee attraction, retention, development and engagement

At TC Energy, we recognize that the personal growth and career advancement of our workforce is fundamental to our success and are committed to developing comprehensive programs that support the professional development and engagement of our employees. These initiatives provide hands-on job experience, peer and leadership mentoring, as well as formal training opportunities.

The training we provide empowers our workforce to adapt to technological advancements and changes in the regulatory environment. This equips our people to reliably deliver energy in a safe, high-quality, and cost-efficient manner. Beyond the direct benefits, these training programs also cultivate a more resilient and flexible work mindset among our employees, ultimately enhancing their overall wellbeing and mental health.

In order to attract and retain top talent, we are working to create more opportunity for greater diversity, equity and inclusion in our workforce. Our culture focuses on providing an environment where everyone is respected for their unique backgrounds and experience. In the inclusive leadership journey, small actions and continuous learning can make a big impact.

REFLECTING THE COMMUNITIES WE SERVE

As a company with infrastructure spanning three countries, TC Energy strives to reflect the diversity of Canada, the U.S., and Mexico within our workforce. By leveraging local expertise and area knowledge, we cultivate a diverse, equitable, and inclusive environment that fosters a strong sense of belonging.

When we bring together people of different backgrounds, ideas, perspectives, and skills, we outperform. Embracing diversity within an open and transparent culture where everyone feels they belong makes our organization more resilient and innovative, enabling us to navigate an ever-changing world.

Our dedication to diversity and inclusion extends across our organization, from the frontline to the boardroom. The appointment of a Chief Inclusion and Diversity Officer (CIDO) in 2021 provides the focus needed to continue to drive progress, sustain our strong performance and create a sense of belonging across our organization.

WANT TO LEARN MORE?

+ [Diversity, Equity and Inclusion Action Plan](#)

Progress made in 2023 includes:

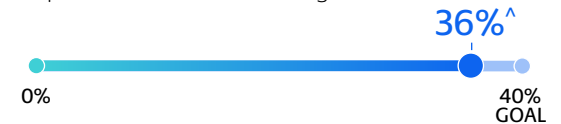
- Increased number of women in executive leadership positions, VP and above, by 11 per cent.
- Celebrated one year since launching Women@TCE Employee Inclusion Network, which has shown tremendous growth and created a space for networking, mentorship, collaboration and development.
- Successfully piloted Elevate(her), a women’s cohort mentorship program which connects women across our footprint at all levels.

We are broadening our efforts beyond corporate and leadership roles for women. Our enhanced focus now encompasses women at all levels of experience, including those based in our field locations. This provides the opportunity for all women within our company to grow and develop their careers.



OUR TARGET: 40 per cent women in leadership positions in our corporate locations³⁵ by the end of 2025.

STATUS: While we advanced our leadership diversity in 2023, with 36 per cent of women in leadership positions, we recognize there is still room for improvement and continued growth.



NEW METRIC & TARGET

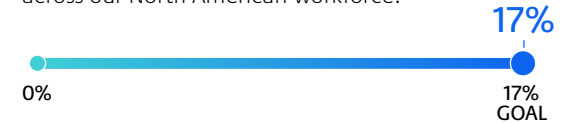
METRIC: Overall representation of women across our workforce.

TARGET: Increase the overall representation of women at TC Energy³⁷ by 2 per cent annually over the next three years.



OUR TARGET: 17 per cent members of visible minorities in leadership³⁶ positions across our Canadian and U.S. workforce.

STATUS: In 2023 we maintained our target of 17 per cent of visible minorities in leadership positions across our North American workforce.



³⁵ Leadership positions in our corporate locations of Calgary, Houston, Charlestown and Mexico City.

³⁶ Leadership positions across our workforce in Canada and the U.S.

³⁷ Includes women and female-identifying individuals at all levels, in all locations (Canada, U.S. and Mexico - both corporate and field locations). Calculated as the share of women in the total force.



Disability inclusion on the playing field and at work

In support of the Special Olympics Canada Legacy Program, TC Energy launched a disability-inclusive employment program in March 2024, creating a meaningful employment opportunity for an individual with an intellectual disability in our Calgary office. The Legacy Program challenged businesses to break down barriers for people with intellectual disability and make the workplaces more inclusive for everyone. During this process we advanced disability education and awareness for our workforce and we now have a goal to add additional employment opportunities in the future.



Diversity is a reality but inclusion is a conscious choice we must make every day. I'm excited that we are prioritizing this choice through the creation of our new disability-inclusive employment program. By recognizing and embracing different experiences, ideas, perspectives and unique skills, we not only enhance innovation but also foster a richer culture of belonging."

FRANÇOIS POIRIER

President and CEO

EQUAL OPPORTUNITY AND ACCESSIBILITY

We respect the core principles of dignity, independence, integration and equal opportunity. We are committed to interacting fully with our employees, job applicants, partners and communities, without barriers. We strive to improve accessibility by listening to feedback from our employees and other stakeholders and by regularly reviewing our programs. Our Accessibility Plan outlines the steps we have taken and the steps we plan to take in the next three years to identify, prevent, and remove barriers for persons with disabilities.

Our Equal Employment Opportunity and Non-Discrimination Policy is intended to eliminate barriers and discrimination regarding any aspect of employment for current employees and new applicants, and to outline our commitment to equal employment opportunity for all, regardless of race, colour, gender, sexual orientation, marital status, religion, national origin, age, physical or mental disability, Veteran status or other grounds protected by law.

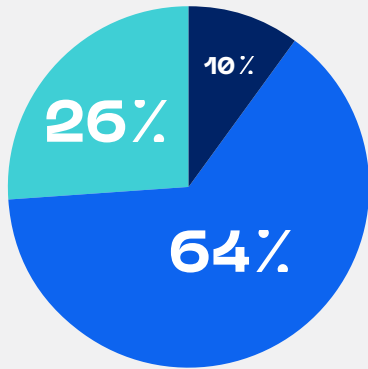
WANT TO LEARN MORE?

+ [TC Energy Accessibility Plan](#)

+ [Equal Employment Opportunity and Non-Discrimination Policy](#)



Workforce Demographics



- Under 30 years old
- 30-50 years old
- Above 50 years old

PROMOTING GENDER EQUITY AND EMPOWERMENT

At the core of our talent philosophy is the empowerment of all employees, regardless of gender or ethnicity. To support the development of our female-identifying leaders, we have established the Women's Leadership Network. This network provides opportunities for these leaders to connect, share experiences, learn from others, and build a stronger community. Throughout the year, the network hosts a variety of events, including a speaker series that features TC Energy Board members, prominent authors, and community leaders. These speakers share valuable leadership lessons and inspirational stories.



Canadian core workforce³⁸

37% WOMEN

3% INDIGENOUS

2% PERSONS WITH DISABILITIES

24% VISIBLE MINORITIES



U.S. core workforce³⁸

18% WOMEN

15% MINORITIES

1% INDIVIDUALS WITH DISABILITIES

5% VETERANS



Mexico core workforce³⁸

29% WOMEN

³⁸ Further information is provided in the [Appendix: Performance data](#).

PROGRESS ON WOMEN'S EMPOWERMENT PRINCIPLES

TC Energy is a signatory to the UN Women's Empowerment Principles, established by the UNGC and UN Women. The seven core principles serve as guidance to companies on how to promote gender equality and empower women in the workplace, marketplace and community. Our 2023 activities were focused on two principles:

Principle 4 – Education and training for career advancement

The Elevate(her) Women's Mentorship Program links women in senior leadership positions with a cohort of mentees across business units and operating areas. It offers education and networking opportunities through the Women@TCE employee inclusion network, for women, female-identifying individuals and allies at all levels. Our Women in Leadership Network, provides education and networking opportunities to support career development and business acumen at leadership levels.

Principle 6 – Community initiatives and advocacy

We are investing in community partnerships like the Women's Energy Network in Houston, Texas where employees can support and promote gender equality and women's empowerment through education and networking. Our This Is Me video series highlights the impact of TC Energy's employees as we celebrate International Women's Day, Black History Month and other key dates in the calendar.

WANT TO LEARN MORE?

- + [United Nations Global Compact \(UNGC\)](#)
- + [Women's Empowerment Principles \(WEP\)](#)
- + [WEP Gender Gap Analysis Tool](#)

Accelerating pay equity

During 2023, TC Energy achieved significant progress towards realizing gender pay equity. In alignment with Canadian Federal Pay Equity legislation, we initiated a comprehensive Pay Equity Project to review our compensation programs, policies, and structures that has included the creation of a Pay Equity Committee, which is tasked with evaluating the fairness of our compensation practices. From this work, we have developed a formal company-wide Pay Equity Plan to identify any potential gender pay gaps and outline strategies to bridge those gaps.

Actions in 2023

- Formal Pay Equity Project to review compensation practices and assess potential gender pay gaps.
- Pay Equity Committee of volunteer employee and employer representatives to review and evaluate pay practices and policies.
- Standardized job evaluation of all employees impacted by equity legislation to assess equal earning potential for work of equal value.
- Review of gender predominance of different job classes across the organization.
- Preliminary review of gender pay gaps based on work of equal value, as outlined by Canadian legislation.
- Working towards Canadian Federal Pay Equity Act compliance by September 2024.



Photography submitted by:
**CINDY HOPKINS, ADDIE WRITE
AND CAYLYN KERR**



Photography submitted by:
JANET HILL, ALYSSA MCKENNEY



Photography submitted by:
JOHN SALAZAR AND LEAH TANNER

CELEBRATING OUR DIVERSE BACKGROUNDS AND PERSPECTIVES

As part of TC Energy's ongoing efforts to hear and value the voices of underrepresented employees, our Employee Inclusion Networks (EINs) are continuing to grow. These voluntary, employee-led forums bring together people who share common values including race, ethnicity, gender identity, age, sexual orientation, mental health, Veteran status and physical ability.

In 2023, we launched new EINs for the 2SLGBTQIA+ community, women, Indigenous peoples and Veterans. All employees who identify as members of these designated diversity groups are encouraged to join, as well as allies who, although not part of a marginalized group, wish to stand in solidarity with them.

We also saw the launch of Ujima, our EIN for the Black community and allies. The Swahili word ujima (pronounced oo-JEE-mah) means collective work and responsibility. During Kwanzaa from December 26 to January 1, a time of learning, family and celebration for African-American culture, Ujima was highlighted on the third day of the week, when participants focus on building and maintaining community together and solving problems collectively.

DRIVING A HIGH-PERFORMANCE CULTURE THROUGH RECRUITMENT AND DEVELOPMENT

We work to attract the best people to our company by providing competitive total rewards, a dynamic work environment and growth opportunities. Our hiring practices are geared toward building a workforce that reflects the diversity of the communities where we live and work and we are committed to being an industry leader in training and employee expertise.

We offer our employees flexible, hybrid work arrangements and have extended our parental and maternity leave policy to working parents. Employees can use our dual-purpose wellness centre with designated multi-faith areas, as well as access our Employee and Family Assistance Program (EFAP) to foster all-around employee wellbeing.

In 2023, we welcomed 927 new employees into our workforce and delivered an average of 34 hours of training and development per full-time-equivalent employee through a wide range of channels, including self-directed e-learning programs, live interactive skill-building sessions and core programs designed to support emerging leaders. Training programs cover health, safety, environment, Indigenous awareness, inclusion and diversity, leadership, compliance, cybersecurity, and mental health and psychological safety.

TC Energy funds post-secondary education programs supporting visible minorities, Indigenous peoples and women. TC Energy also sponsors conferences promoting diversity, such as:

- + [American Indian Science and Engineering Society](#)
- + [Society of Women Engineers](#)
- + [Society of Hispanic Professional Engineers](#)
- + [National Society of Black Engineers](#)
- + [American Association of Blacks in Energy](#)



TC Energy's stand on a respectful workplace

As a federally regulated employer in Canada, the U.S. and Mexico, TC Energy is required to support Equal Employment Opportunity, Affirmative Action, Employment Equity and Accessibility. Leaders are responsible for implementing the company's Affirmative Action, Employment Equity and Accessibility plans within their respective areas and promoting and following practices so that all qualified people receive equal consideration.

Our Harassment-free Workplace Policies in Canada, the U.S. and Mexico affirm TC Energy's commitment to creating a respectful and safe Workplace. Our Reasonable Workplace Accommodation Policy aims to create an inclusive and non-discriminatory work environment, including during the recruitment and selection process. TC Energy is also committed to creating a psychologically safe environment where individuals have the confidence to self-advocate for reasonable accommodation without fear of retaliation.

WANT TO LEARN MORE?

- + Harassment-free Workplace Policies: [Canada](#), [U.S.](#), [Mexico](#)
- + [Reasonable Workplace Accommodation Policy](#)
- + [Equal Employment Opportunity and Non-Discrimination Policy](#)

Gathering employee perspectives with *The Pulse*

TC Energy introduced *The Pulse* to find out what matters to employees. *The Pulse* is not a typical employee engagement survey – it's a smart tool that leverages leading technology to get to the heart of what matters the most to our people. The anonymous, five-minute, bi-weekly survey gauges sentiment on work environment, goals and company growth, recognition, safety, health and wellbeing. Real-time data is collected and scored on four drivers: engagement, health and wellbeing, diversity and inclusion, and transformation and change. The data is benchmarked against industry peers to gain a better understanding of how we measure up, with employee feedback providing leadership with valuable information about how to build a healthy and productive workplace environment and helping shape the future of the organization.

In 2023, *The Pulse* had a 90 per cent overall employee engagement rate and we are continuing our Pulse surveys through 2024.



Engagement



Health & Wellbeing



Diversity & Inclusion






Transformation & Change



Mental health and psychological safety

A holistic approach to mental health and psychological safety

-  Launched mental health training to all employees to raise awareness, understanding and reduce stigma.
-  Offered a variety of health and wellness resources to support employee wellbeing.
-  Monitored indicators such as, but not limited to, absence and disability rates to assess the efficacy of the mental health and wellness programs.
-  Realized a 35 per cent decrease in short-term disability absence rate and an 8 per cent reduction in casual absences compared to pre-COVID years (2019).

MAKING SPACE FOR WELLBEING

At TC Energy, we're aware of the continued need for supportive programs to enhance employee wellbeing in all aspects of work and personal life. Accordingly, we provide resources and support across four pillars of health and wellbeing to align with employee needs and industry expectations: physical health, emotional health, social fitness and financial security. We prioritize streamlined, co-ordinated communication and socialization so employees can receive this information in a timely manner and utilize all resources available to them.

Our objective is to make our employee mental health and wellness holistic by integrating employee engagement and wellness programs.

In 2023, we launched employee training to increase mental health awareness, understand the signs and symptoms of mental health problems, highlight resources available to our employees and decrease stigma. We also launched dedicated leader-centric practical skill-building sessions to assist in creating a safe space for our employees and we are striving to find better ways to measure outcomes.

Skill-building sessions lead the way to wellness

- How to create a supportive environment for employees by touching base regularly and responding productively.
- How to build trust with employees, practicing vulnerability and authenticity.
- How to set clear expectations and healthy boundaries, establishing clear goals, supporting work-life balance and preventing burnout.

OUR TARGET: Mental health awareness training: 100 per cent of employees by end of 2023.

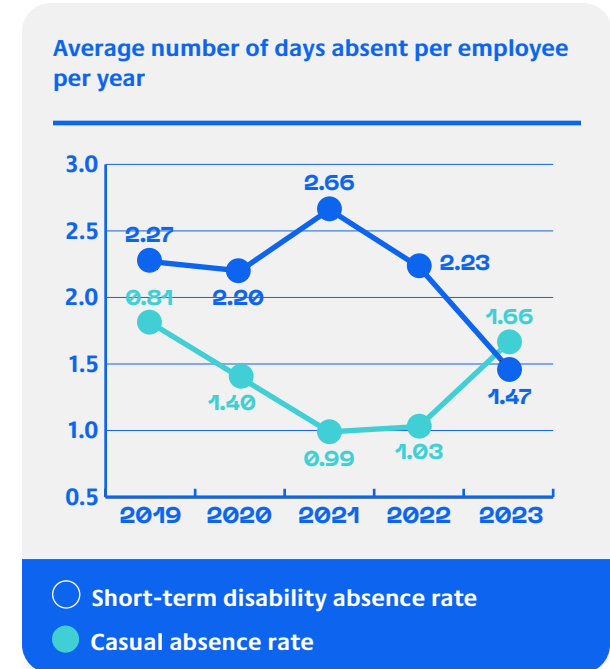
STATUS: In 2023 we achieved a completion rate of 99 per cent, just shy of our target, for our workforce training program focusing on the importance of mental health. This represents over 6,500 employees across Canada, the U.S. and Mexico. Starting in 2024, all new leaders and employees will be required to complete mental health training within 90 days of joining the company, as part of their onboarding program.

0% 99% 100% GOAL



Workforce absences have traditionally been managed in isolation, as a standalone and reactive function focused on costs. In reality, absences are complex; sometimes the severity of symptoms may be misunderstood, underestimated or even ignored completely. Employee absences also create downtime and schedule changes that impact productivity and safety.

TC Energy has recognized that a more strategic, progressive and proactive wellness approach is required that includes a holistic view of absences and their impact on our organization. By comparing our short-term disability and casual absence rates to last year, we see the casual absence rate has increased. However, the decrease in the short-term disability rate over the same time period indicates that our employees are taking care of themselves in the near-term, without requiring longer-term absences. This is a positive reflection of our employee engagement strategies and mental health and wellbeing program design. It also indicates that our workforce is successfully leveraging the tools and resources available to them.





2023 Mental Health Awareness Month: #Together4MH campaign

In 2023, TC Energy's #Together4MH initiative raised awareness of mental health across the organization, addressing the stigma of mental health, while increasing resilience within our workforce and supporting community causes.

Employee donations of over **\$73,700** were matched by TC Energy, resulting in community investment of more than **\$438,500** to **310** non-profits.

Over **350** employees volunteered nearly **3,000** hours with mental health-focused community organizations across North America.

Employees completed more than **12,700** activities on their #Together4MH bingo cards to strengthen personal and community mental health.





EXTERNAL RELATIONSHIPS



With operations and construction activities across North America, we recognize the need to engage locally and to respond to the changing needs and expectations of stakeholders and rightsholders. Strong relationships with landowners, Indigenous groups and local communities is essential to positive, trusting and long-lasting partnerships and collaborations.

Community investment priorities

TC Energy's community investments are directed to organizations that offer opportunities to engage with stakeholders and Indigenous groups, with the goal of building public confidence in our projects. Whether we are providing grants, awarding scholarships or supporting local events, we strive for mutually beneficial relationships that address our biggest social challenges. When we give back where we live and work, we build a stronger future together.

OUR TARGET: Invest \$25 million annually through 2023, increasing to \$30 million annually by end of 2025.

STATUS: We continue to meet our community investment targets. In 2023 we invested over \$30 million in communities across North America, an increase of 22 per cent from 2022.

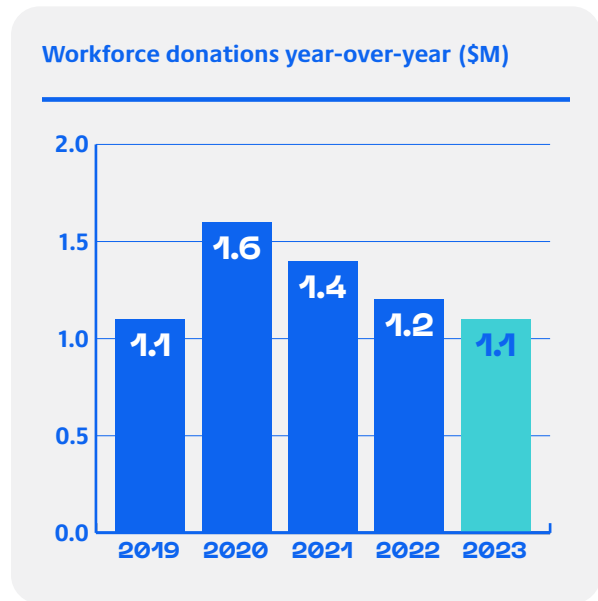
\$34 M

\$0 \$25 M GOAL

GIVING WITH SOCIAL IMPACT AS OUR GUIDE

Our Build Strong community giving program has four focus areas where we believe we can provide the greatest impact: safety, education, environment and resilient communities.

[WANT TO LEARN MORE?](#)
+ [Build Strong](#)



BRINGING ENERGY TO EDUCATION

In Alberta and Ontario, TC Energy stepped up to support teachers and students in underserved communities, with the goal of improving educational outcomes in mathematics. During the 2023-24 school year, the JUMP Math program reached 1,000 students across 40 grade K-8 classrooms.

The JUMP Math program helps students build strong foundational knowledge and skills in mathematics, equipping them to thrive academically and in life. Pre- and post-testing of participating students show that their math skills grew on average 2.5 times higher than expected.

BUILD STRONG SUPPORTING FIRST-RESPONDERS

TC Energy's Build Strong program partners with non-profit [NDRI Ventures](#), which supports emergency first-responders and their families, especially in smaller, rural, medically underserved communities across the U.S. The Pipeline to Wellbeing initiative received US\$248,000 in funding to create three much-needed resources.

- **Responder Strong** - five train-the-trainer sessions leveraging their Responder Strong mental health curriculum that delivers mandatory mental health training for responders in several U.S. states.
- **YOU|Responder Strong Wellness Tool** - access to a browser-based wellness resource that's free 24/7 to responders and their families
- **Responder Wellness Micro-Education Series** - updates to a video series of actionable advice on mental wellbeing and resiliency, including content for leaders addressing effective management of personal, career and critical incident stress.

The Pipeline to Wellbeing initiative is designed for those on the frontline in an emergency, including emergency medical services (EMS), firefighters, law enforcement, ski patrols, and search and rescue. Individuals and their families can turn to the program for help with burnout, tactical performance, financial worries, physical health and relationship challenges.



SOCIAL IMPACT SCHOLARSHIPS REACH OVER 5,000 STUDENTS

Launched in 2017, TC Energy's Scholarships program continues to grow in scope and impact. In 2023, we received over 3,440 applications from students located in Canada, the U.S., and Mexico, and awarded more than 775 scholarships totaling over \$2.5 million.

Over the lifetime of the program, TC Energy has provided more than 5,000 scholarship awards to students enrolled in energy-related disciplines, including trades, STEM, and vocational studies.

Through this scholarships initiative, TC Energy empowers the next generation of community leaders by providing them with access to education and training opportunities.

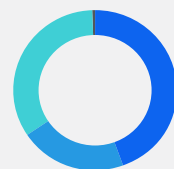
Scholarship program results³⁹

3,440+

APPLICATIONS RECEIVED IN 2023 (#)

MORE THAN \$2.5M & 775 SCHOLARSHIPS AWARDED

Scholarships awarded by gender



Female	346
Male	164
Unknown*	261
Non-Binary	4

55% OF SCHOLARSHIPS AWARDED TO INDIGENOUS PEOPLES

🔗 **WANT TO LEARN MORE?**

+ [Social Impact Scholarships](#)

+ News release: [TC Energia scholarship recipients](#)



TC Energy STEM Scholarship (Canada and U.S.) For students studying science, engineering, technology or math academic disciplines relevant to the energy industry.



TC Energy Indigenous Legacy Scholarship (Canada, U.S. and Mexico) For Indigenous students pursuing any full-time, post-secondary program at a registered educational institute.



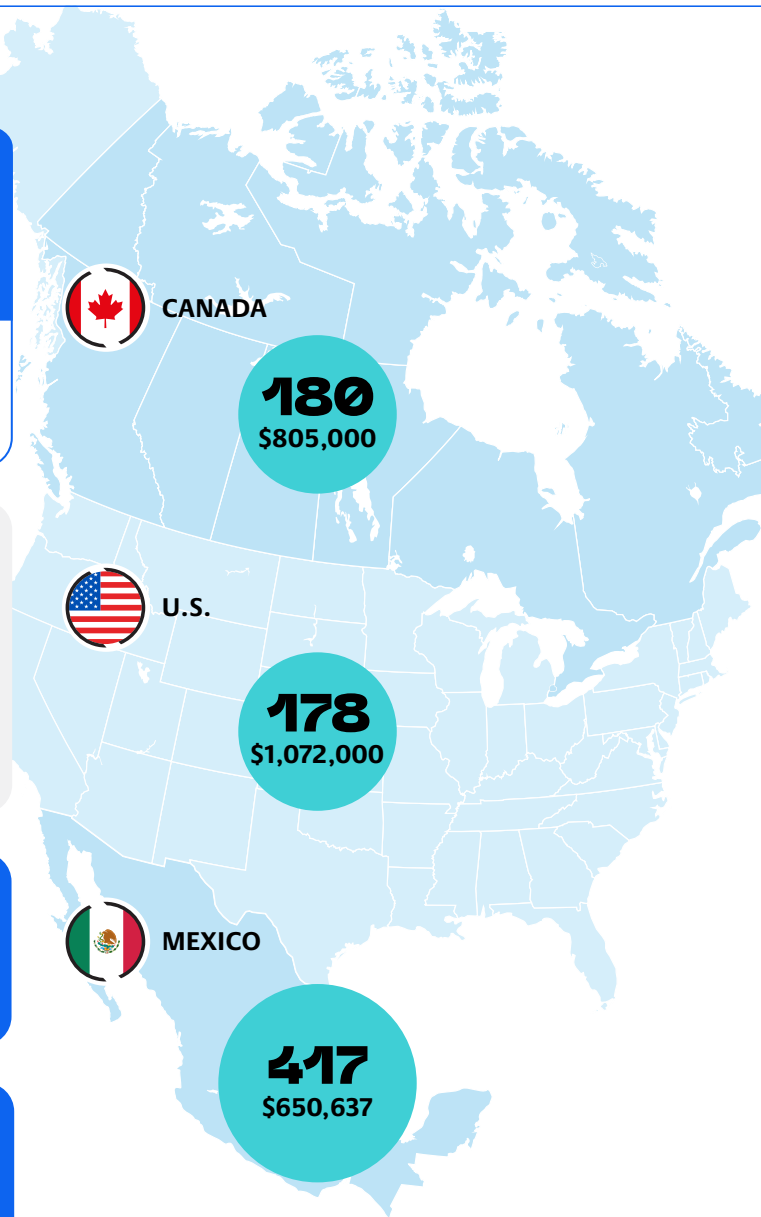
TC Energy Trades Scholarship (Canada, U.S.) For students studying trades in the energy industry.



TC Energy Women's Scholarship (Mexico) For female entrepreneurs pursuing higher-level vocational training, professional degree or certification program.



TC Energy Technical Scholarship (Mexico) For students enrolled in technical schools offering employability training relevant to the economic and social needs of their community.



● TOTAL SCHOLARSHIPS AWARDED IN 2023

³⁹ The numbers collected were based on Scholarship recipients across North America that wished to participate in the demographic questionnaire.



INVESTING IN INDIGENOUS TALENT

Amanda Simon graduated with a Bachelor of Arts degree from Calgary's Mount Royal University in 2023 as an Indigenous Legacy Scholar. Amanda shared how receiving her scholarship helped her attain her educational goals while supporting her family.



Initially, I was ecstatic and beyond grateful to be chosen as I had a lot on my plate during that time. There were many deaths, struggles, and challenges that almost kept me from progressing in school and at home. Being chosen for this award at the time gave me hope to finish; it instilled a sense of strength, resilience and pride within myself to keep moving forward.

One thing is for sure though, I did not take this scholarship for granted and utilized it the best way I could, which was providing for my family, paying for parking at school, and taking care of bills. This scholarship was one of the best things that happened to me, and I want to continue to extend how grateful and thankful I was to be given such an amazing gift. TC Energy will forever be one of the reasons I have continued my educational journey. You would be glad to know that I am still in school and will be the first Indigenous person, female, and mother to convocate with English Honours from Mount Royal University. I will then pursue my dream of becoming a family physician."

AMANDA SIMON

Indigenous Legacy Scholarship Recipient





FORGING STRONGER BONDS WITH LOCAL COMMUNITIES IN MEXICO

TC Energy is increasing community investment initiatives across Mexico. Our teams have been engaging with local stakeholders, understanding their aspirations, and identifying opportunities to leverage our presence to support the region. One such example is in San Luis Potosí, where we invested MXN\$1.4 million to install a solar array adjacent to our Villa de Reyes compressor station. The renewable electricity generated is fed into the Comisión Federal de Electricidad (CFE) grid, powering a water well serving the Ejido Casco Hacienda de Pardo and nearby communities of El Mirador and San Lorenzo. This sustainable energy source is reducing electricity costs for over 400 local families.

Initiatives like this demonstrate our commitment to working closely with Mexican communities to support their needs and transition to a lower-carbon future.

LAST YEAR, TC ENERGY INVESTED

MXN\$1.4M



TC Energía shines a light in remote Tortugas and La Lomita

To most of us, electricity is readily accessible but for some people living in very remote and poor communities, it is a hope, not a certainty.

In May 2023, TC Energía joined forces with Iluméxico to pilot their rural electrification program, installing solar panels in a remote central region of Mexico near our Tula-Villa de Reyes pipeline. The solar panel installation program from TC Energía includes the service, maintenance, and repair of the systems, which is carried out by young people from the region who receive training from Iluméxico through formal employment. The Iluméxico team also worked with Concentrarte AC to provide a week of recreational science workshops, music and community cinema.

San Luis Potosí

WANT TO LEARN MORE?

+ News release and video:
[TC Energy and Iluméxico join forces](#)



Landowner relations

Landowners are an important rightsholder group; without their trust and cooperation, our business is not possible. Directed by our Guiding Principles, we focus on providing timely project support while building long-term, meaningful relationships, keeping landowners informed and involved through all phases of a project. Through these efforts, we comply with legal and regulatory requirements, and set up our employees, contractors, and administration teams for successful, honest and long-lasting relationships with our landowners, grounded in transparency, fairness and accountability.



Building nature one acre at a time

TC Energy's multi-year partnership with New Acre Project will help increase biodiversity, improve watershed health and mitigate the effects of climate change on 135 acres of marginal and uneconomic farmland in Ontario and Québec. New Acre Project farmlands are offered by farmers and ranchers, voluntarily enrolled in the ALUS program. This farmer-led model is designed to help communities and corporations achieve nature based solutions and help create rural resilience, in support of climate change and biodiversity goals.



TC Energy is dedicated to minimizing our environmental footprint and making a positive difference in the communities that we serve. New Acre Project provides an innovative opportunity to invest in building local climate resilience through farmer-delivered environmental projects in the areas where we operate."

SHARON TOMKINS

Vice-President, Sustainability & Social Impact

WANT TO LEARN MORE?

- + [ALUS New Acre Project](#)
- + [News release: TC Energy's partnership with New Acre™ Project Empowers Farmers to Fight Climate Change](#)



INNOVATIVE LAND STEWARDSHIP WITH LANDOWNERS ON TC ENERGY'S CANADIAN MAINLINE

TC Energy's Pipe Integrity Post-Construction Monitoring and Land teams worked closely with a local landowner and industry partners to address erosion issues across multiple pipeline rights-of-way along our Canadian Mainline system. This collaborative approach, facilitated by the landowner's cooperation and innovative solutions, serves as a model for future landowner-industry partnerships. The landowner provided critical insights into historical farming practices that had contributed to the erosion problems. Based on this understanding, they implemented a new crop rotation, irrigation, and equipment plan to help mitigate the risk of future erosion along the pipeline rights-of-way. This collaborative effort represents an effective way to address environmental challenges while maintaining positive relationships with local stakeholders.

LENDING A HELPING HAND

TC Energy worked closely with a landowner in West Alexander, Pennsylvania, who was facing a challenging water-related issue on his property. After construction work near TC Energy's Columbia Pipeline System caused a natural spring to surge, known as a "seep," the landowner's cattle were unable to graze on their prime pasture. Even though TC Energy did not cause the issue, we took action, developing a plan with the landowner to address it.

Our team helped the landowner hire the appropriate contractor to install a new drainage system, which successfully restored the pasture and brought it back into production. Notably, the diverted spring is now serving as a valuable source of drinking water for the landowner's livestock.

WANT TO LEARN MORE?

- + [Commitment: landowner guiding principles](#)
- + [Building positive relationships with landowners](#)





Employee giving

Though our employee giving program, TC Energy has been working to build stronger community spirit for over 10 years. Our workforce has donated more than \$35 million and volunteered over 242,000 hours, supported by TC Energy's matching of employee donations and paid time off to volunteer.

[WANT TO LEARN MORE?](#)

+ [Build Strong Employee Participation](#)



OUR TARGET: 60 per cent workforce giving participation through 2025.

STATUS: In 2023, we achieved this target with 60 per cent participation in our workforce giving and volunteering program, which included a 21% increase from the previous year for volunteer hours logged during unpaid time.



NOURISHING OUR NEIGHBOURS CAMPAIGN FEEDS HOPE

In 2023, TC Energy's employees gave hope by providing food and support to those who need it most. From volunteering and food drives to our Putt-A-Hole in Hunger competition, the Nourishing Our Neighbours campaign brought benefits to the local communities. In just under three weeks, our teams stood up for food security:

OVER

\$800,000

COMMITTED TO ORGANIZATIONS ACROSS NORTH AMERICA VIA EMPLOYEE DONATIONS AND CORPORATE MATCHING

4,049

VOLUNTEER HOURS LOGGED BY OUR WORKFORCE

13,500

POUNDS OF FOOD DONATED

As a result of this hard work and dedication, TC Energy was named the Overall Winner in the [Houston Food Bank Hunger Game competition](#).



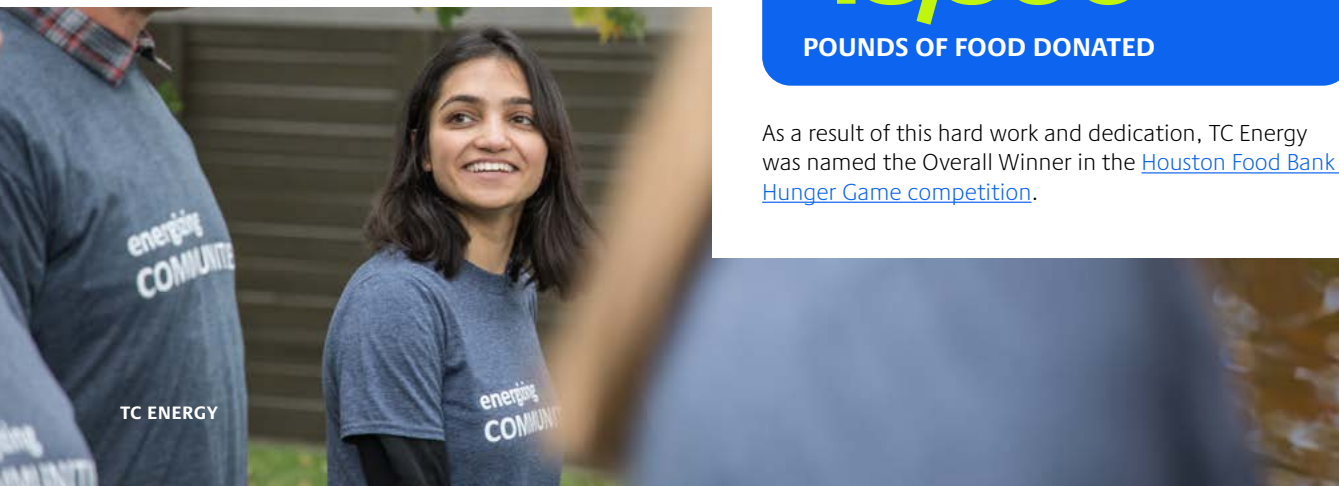
Special Olympics Canada Winter Games Calgary 2024

TC Energy supported the 2024 Special Olympics Canada Winter Games with our CEO Francois Poirier as co-chair. The focus for TC Energy and its employees was the Volunteer Program, which needed 750 people to bring the Games to life.

In addition, a diverse team of employees from TC Energy designed Eagle's Flight, a 5-foot-8-inch, natural gas-powered cauldron featuring the eight Special Olympics sports and the Indigenous Seven Grandfather Teachings, which was lit with the Flame of Hope during the opening ceremony. Atop the cauldron is an eagle, which represents the love that empowers athletes to achieve their dreams. Built on a foundation of recycled TC Energy pipeline of different sizes, the cauldron was created out of 85 per cent recycled material by weight. The cauldron will be installed at its permanent home at the Seven Chiefs Sportsplex located on the Tsuut'ina Nation in Alberta.

[WANT TO LEARN MORE?](#)

+ [2024 Special Olympics](#)





INDIGENOUS ENGAGEMENT AND RECONCILIATION



As we make progress on our reconciliation journey, TC Energy strives to build and sustain Indigenous support for our operations and projects through early, honest and continuous communication and by building mutually beneficial partnerships. Our approach to collaboration aligns with the spirit and intent of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) through proactive and continued engagement to share information, listen and understand interests and concerns, work together to mitigate impacts and find opportunities to share in benefits.

In 2023, we published our [Canadian Indigenous Equity Framework](#), which outlines our approach to working with communities to develop equity ownership and long-term revenue sources. We heard that Indigenous people want to share in the economic opportunities in their territories to build

prosperity in their communities. The Equity Framework demonstrates our commitment to exploring meaningful opportunities for equity ownership across our Canadian footprint to build greater alignment and share in benefits through partnership.

LISTENING WITH RESPECT FOR INDIGENOUS VOICES

In the U.S. and Mexico, where Indigenous consultation is led by the federal government, we work with government bodies for effective Indigenous consultations including:

- Successful negotiations for right-of-way easements and annual operations meetings with Fond du Lac Band of Lake Superior were completed in 2023 and 2024. Right-of-way easement negotiations with Leech Lake Band of Ojibwe were successfully completed in early 2024. Bad River Band of Ojibwe negotiations continue in 2024.
- In 2023, as part of an agreement for the Virginia Reliability Project, we worked collaboratively with the Nansemond Indian Nation to acknowledge their interests and address concerns through regular meetings with Tribal leadership and supporting of ethnographic studies.
- As part of consultation processes in 2022, led by the federal government in Mexico along the Tuxpan-Tula pipeline project, we received feedback regarding project routing. In response to feedback from Indigenous communities, we re-routed the pipeline resulting in the agreement of all Indigenous communities who were consulted on the project.



IMPROVING OPPORTUNITIES FOR INDIGENOUS GROUPS

By partnering with Indigenous businesses and community members, we contribute to the social and economic wellbeing of the communities where we do business. We build meaningful, reciprocal long-term relationships with Indigenous businesses, offering operations and project-related contracting opportunities to qualified local companies.



OUR TARGET: Establish an external Indigenous Business Advisory Council by Q3 2023, operationalize by Q4 2023, to advise our business units, Supply Chain, and Indigenous Relations groups on best practices and obstacles to working with TC Energy.

STATUS: We did not achieve this target. Our renewed focus in 2024 is a revised approach that incorporates the learnings and feedback from Indigenous business representatives.

STRENGTHENING PARTNERSHIPS WITH INDIGENOUS BUSINESSES

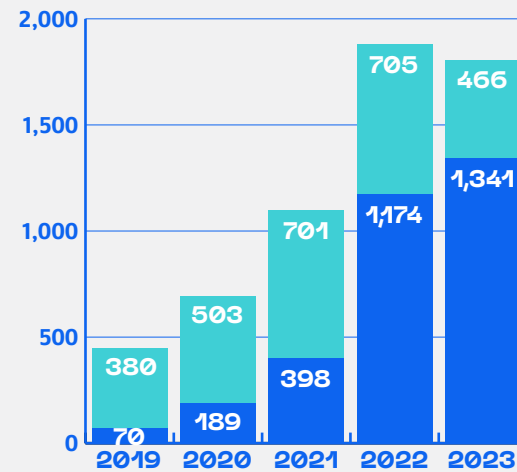
TC Energy is committed to creating meaningful economic participation for Indigenous groups throughout our project life cycles. In 2023, we engaged with Indigenous business representatives to understand their hiring and contracting experiences with our company. These insights may inform a new framework to enhance collaboration with Indigenous-owned businesses.

Building on this, we plan on more in-depth engagement in 2024 to develop a renewed strategy for an external Indigenous business advisory group. This group will provide guidance to strengthen TC Energy's approach to delivering business, employment, and training opportunities to Indigenous communities on whose lands we operate.

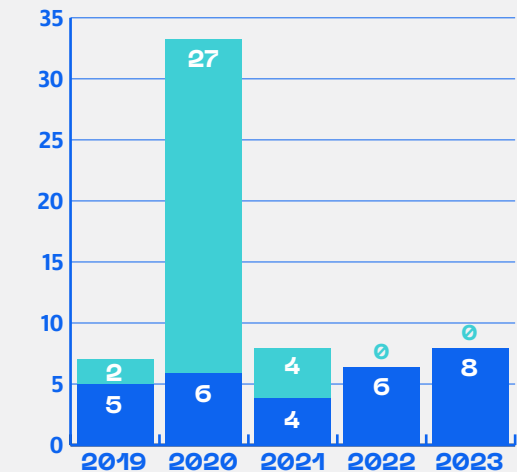
⁴⁰ Further information is provided in the [Appendix: Performance data](#).

Supplier (Indigenous and Native American) spend (Cdn \$M)⁴⁰

Canadian Indigenous



U.S. Native American



○ Tier 1 ● Tier 2

NEW METRIC & TARGET

METRIC: Establish an external Indigenous business advisory group to provide feedback to our business units, Supply Chain, and Indigenous Relations groups on best practices and obstacles to working with TC Energy.

TARGET: Operationalize a pilot Indigenous business advisory group by the end of Q4 2024.

The **Indigenous Advisory Council** with members representing Indigenous perspectives across Canada, provides strategic guidance to our executive leadership team on reconciliation-related initiatives to support resilient Indigenous communities and the development of a strong shared future.

The **Indigenous advisory business group** will be comprised of Indigenous business owners and individuals and select TC Energy business unit representatives and is intended to advise on Indigenous hiring and contracting practices, providing a mechanism for feedback to help shape future engagement opportunities.



INDIGENOUS POST-CONSTRUCTION MONITORING

TC Energy works closely with Indigenous Communities when infrastructure crosses their territories. The Nova Gas Transmission System (NGTL) integrated Indigenous Post-Construction Monitoring (IPCM) with its environmental monitoring for the 2021 NGTL System Expansion and Edson Mainline Expansion Projects. Indigenous monitors were hired from local communities to examine the location post-construction and to share traditional knowledge and insights with our team as a check that reclamation is occurring effectively and to share this information back to their communities.

In fall 2023, Indigenous groups submitted reports supportive of reclamation efforts, noting the regrowth of culturally significant vegetation and wildlife. Many issues the Indigenous monitors identified align with NGTL's findings, evidence of a shared understanding of environmental concerns. NGTL is committed to ongoing collaboration, including engagement sessions to discuss monitoring results and incorporation of IPCM feedback into environmental reports.

Coastal Gas Link: Respecting and building relationships

In 2023, the Coastal GasLink pipeline project achieved mechanical completion, reaching a critical milestone for the project and the Indigenous communities we have built relationships with for over a decade. Since 2012, we have engaged Indigenous communities building relationships, listening to feedback and adapting our project plans to address community interests and concerns, including over 3,100 in-person meetings and over 50,000 communications and interactions. We signed long-term agreements with all 20 elected Indigenous Nations, which provide support for the project and share benefits over the project's lifecycle. Through construction, over \$1.8 billion in contracts were awarded to Indigenous and local businesses and more than 600 Indigenous women and men were working on the Project.

In response to Indigenous Nations expressing a desire to become owners in Coastal GasLink, we signed option agreements with 17 nations to sell a 10 per cent equity interest in the Coastal GasLink Pipeline Limited Partnership to Indigenous Nations across the project corridor.

Coastal GasLink implemented the Construction Monitoring & Community Liaison (CMCL) Program, which provide Indigenous Nations opportunities to monitor construction activities in their traditional territories. This successful mechanism increased transparency for Indigenous Nations on the environmental, cultural and traditional land impacts of construction, validating that appropriate mitigation measures were implemented.

We also implemented the Community Workforce Accommodation Advisor (CWAA) Program to support a positive experience in the workforce accommodations for the workforce and neighbouring Indigenous and non-Indigenous communities. We achieved this through programming that supported mental wellness, cultural education, cross-cultural sharing, and community connection within the workforce accommodation. Both the CMCL and CWAA programs saw great success during their implementation. A total of 79 advisors participated in the CMCL and CWAA programs, representing 20 Indigenous Nations, as well as six Wet'suwet'en Hereditary House groups to promote cultural exchange and traditional knowledge sharing with the workforce and support positive engagement for the Project.





ANITOPISI, AN INDIGENOUS CULTURAL SPACE OPENED IN TC TOWER, CALGARY

The Anitopisi room is a place to celebrate Indigenous culture, create connections, share teachings, engage in ceremony and build relationships. The room showcases Treaty 7 art and artifacts such as the Tsuut'ina Gunaha Language Nest buffalo hide gifted to TC Energy, and an installation commissioned directly from Cree artist Neepin Auger.

The word Anitopisi comes from the Blackfoot for spider's web. The Indigenous term refers to the way in which relationships are mapped in traditional Blackfoot teachings.

Reconciliation Action Plan update

Our [Reconciliation Action Plan](#), including the [2022 update](#), outlines six measurable goals of action to help advance reconciliation, both internally and in the communities where we operate. One of these goals was the establishment of our Indigenous Advisory Council which continues to guide us today. Throughout 2023 the Council, consisting of members representing Indigenous perspectives across Canada, advised on strategies, approaches, and tactics in support of our pillar areas

of focus including: talent and employment, hiring and contracting, and relationships and partnerships. We also welcomed three new members to the Indigenous Advisory Council in 2023. The newest members offer expertise and experience in areas including Indigenous governance, business and partnership development, and Indigenous participation. We are deeply grateful for the feedback and interest from Indigenous groups, partners, employees and the Indigenous Advisory Council. This guidance is informing how we measure progress, identify other areas for improvement and shape new goals.

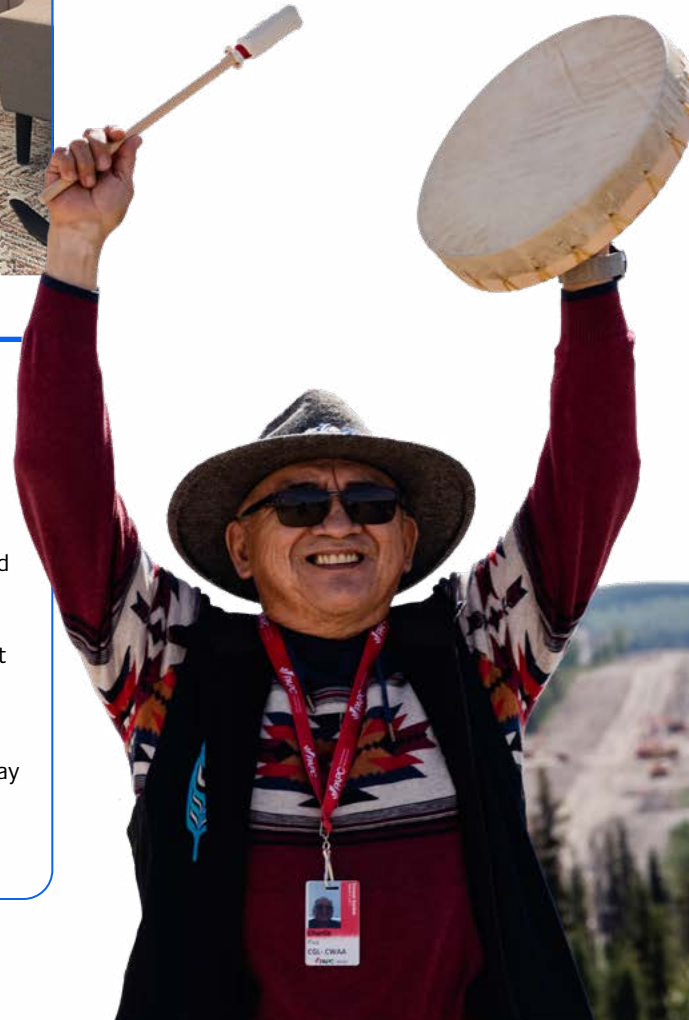
FUNDING INDIGENOUS COMMUNITY-LED CAUSES

As part of our reconciliation journey, we work directly with Indigenous Communities to understand their priorities and initiatives that are most important and will have the greatest impact. We fund Indigenous Community-led initiatives in four areas: safety, education and training, environment, and community.



OUR TARGET: Identify and support community-led reconciliation initiatives through partnerships with Indigenous groups.

STATUS: In 2023, we continued to make meaningful progress in our engagement with Indigenous groups, including \$6.6 million in community investment, allocated to initiatives and needs identified by the communities.





HUMAN RIGHTS



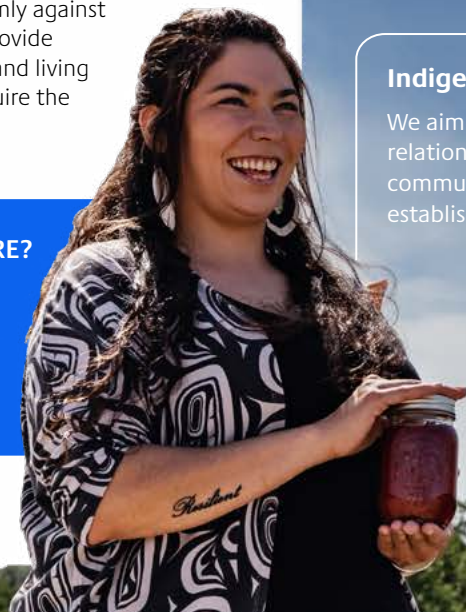
TC Energy does not tolerate human rights abuses. We believe supporting fundamental human rights is a basic yet critical responsibility in how we conduct business. In our business activities — including engaging with Indigenous groups, rightsholders and stakeholders across Canada, the U.S. and Mexico — we support access to fundamental human rights, such as fresh water. We do not tolerate any activity that solicits or encourages abuse of human rights, such as forced labour, child labour, or physical or mental abuse. When adopting best practices, TC Energy considers both the International Bill of Human Rights, which consists of the Universal Declaration of Human Rights, and the core International Labour Organization (ILO) Conventions.

As a committed participant in the UN Global Compact, TC Energy supports the Ten Principles of the UN Global Compact on human rights, labour, environment and anti-corruption. We take action against all forms of discrimination, stand firmly against forced labour and child labour, provide good quality working conditions and living wages for all employees, and require the same of our contractors.

WANT TO LEARN MORE?

+ [Code of Business Ethics \(COBE\)](#)

+ [The Ten Principles of the UN Global Compact](#)



Human Rights Practices

Employment Policies and Standards

We include topics related to diversity, equal opportunities, health and safety, labour conditions and discrimination and harassment.

Training

We reinforce our position in mandated annual COBE training and certification for personnel that we will not be complicit with, nor engage in, any business activity that supports or facilitates abuse of human rights.

Contractor standards and audits

We utilize a risk-based model to manage human rights risks in our supply chain, leveraging various processes to screen and monitor contractors and our global supply chain. Contractors are also issued the Contractor Code of Business Ethics (COBE) Policy to clarify expectations and raise awareness of human rights topics.

Community engagement

We conduct environmental and socioeconomic impact assessments, when required, as well as support for community programs and initiatives that create positive societal impacts.

Indigenous relations programs

We aim to build and sustain positive relationships through early, ongoing and honest communication, mitigating impacts, and establishing mutually beneficial partnerships.

Collective bargaining and union agreements

We focus on fair and respectful work conditions and recognize and respect our employees' and contractors' rights to join associations for the purpose of collective bargaining in a manner that is consistent with laws, rules, regulations and customs.



RESPONSIBLE PROCUREMENT



ADDRESSING VALUE CHAIN MODERN SLAVERY RISKS

TC Energy is taking steps to prevent inadvertent use of forced or child labour in any of our activities in compliance with Section 11 of the Fighting Against Forced Labour and Child Labour in Supply Chains Act in Canada. Since our most likely exposure to forced or child labour is through the use of suppliers, we have focused our attention there. We have mapped our supply chain to identify high-risk suppliers and initiated processes to increase the awareness of forced and child labour through more stringent procurement policies and contractual language, supplier due diligence, supplier onboarding and compliance, as well as internal reporting training.

SUPPLIER REGISTRATION AND ONGOING ANALYSIS

We assessed our supply chain activities with the highest potential for human rights and sustainability risks. Based on our review, no suppliers screened in TC Energy's supply chain were found to have forced or child labour issues.

In 2024, we published our first comprehensive [Forced Labour and Child Labour Report](#). This report details the steps we have taken to investigate and monitor suppliers, including use of our Supplier Management Tool (SMT) which determines each supplier's risk profile and exposure to corruption, forced labour and child labour, and anti-bribery and corruption (ABC).

TC Energy is committed to regular screening and assessment of our supply base. If issues are identified, they will be flagged for senior management review and action in accordance with TC Energy's internal escalation procedure. High-risk suppliers, materials, and manufacturing sites that are flagged by TC Energy's internal processes may be subject to additional internal due diligence screening and risk controls.

Other additional requirements or actions could include:

-  **enhanced contractual terms**
-  **supplier certifications**
-  **third-party inspections in the local jurisdiction**
-  **termination of the relationship**



Supplier diversity

Aligned with TC Energy's sustainability commitments, the supplier diversity program enhances opportunities for diverse, local, and Indigenous communities to participate in the company's projects and operations.

By expanding the supply base, TC Energy gains access to more competitive, innovative, and qualified suppliers. Crucially, this also creates lasting social and economic benefits for businesses and individuals in TC Energy's host communities.



OUR TARGET: Increase percentage of diverse influenceable procurement⁴¹ spend of Tier 1 suppliers 5 per cent year-over-year through to 2027.

STATUS: In 2023, we achieved a 4 per cent year-over-year increase of diverse influenceable procurement spend. We did not meet our 5 per cent year-over-year increase target although this was expected as major projects were completed, including Coastal Gas Link, which comprised a significant portion of our diverse spending. We are nevertheless proud of the efforts we made to achieve this growth and our commitment to supplier diversity and long-term dedication to promoting economic inclusion across our value chain.



INDIGENOUS FLEET FUELING INITIATIVE MOBILE GIS APP

TC Energy is committed to empowering Indigenous communities economically where possible. Our Indigenous Fleet Fueling Initiative leverages new technology to enable more intentional spending with Indigenous-owned service stations.

Our technical experts collaborated across departments, including Indigenous Relations, Supply Chain Fleet Services, and Geographic Information System (GIS), to develop a mobile app. This app allows Canadian field workers to easily identify and support nearby Indigenous-owned fuel stations when refueling company vehicles.

PROGRESSING SUPPLIER DIVERSITY IN VIRGINIA

Columbia Gas Transmission's Virginia Reliability Project (VRP) is a planned expansion and reliability project replacing approximately 48 miles of 1950's pipeline with larger diameter, state-of-the-art steel pipe and cutting-edge technology. As demand for natural gas rises across the [Hampton Roads](#) region, known for its natural harbour and surrounding metropolitan areas, these updates will improve reliability and help meet current and future needs. TC Energy is also seizing the opportunity to open up the contractor bidding process to more diverse businesses in the region.

Working closely with local government, community groups and third-party consultants, TC Energy's supply chain team reached out to prime contractors and local businesses to initiate conversations around diversity and minority ownership. An internal website logged information that led to a comprehensive list of potential local businesses for prime contractors to hire. This data, alongside positive community feedback, allows for the impact of contract value to be tracked back to diverse and minority-owned business in this region.



WANT TO LEARN MORE?

- + [Virginia Reliability Project](#)
- + [Supplier Diversity and Local Participation Business Policy](#)
- + [Opportunities for Indigenous groups](#)

⁴¹ Influenceable procurement spend is defined as purchase order procurement spend and release order procurement spend of Tier 1 suppliers.



GOVERNANCE



IN THIS SECTION

- 75** Corporate and sustainability governance
- 81** Advancing sustainability and innovation
- 84** Supply Chain Governance
- 85** Social impact measurement
- 86** Business ethics and compliance
- 90** Enterprise risk management
- 94** Customer experience and satisfaction

Our commitment to the highest standards of ethics and corporate governance guides us. Our structure and policy framework, with its clear accountabilities and oversight, helps to integrate sustainability and innovation into our business. We believe incorporating sustainability into our governance behaviour is not only an ethical imperative but it also reduces our risk profile and contributes to our bottom line.



GOVERNANCE COMMITMENTS



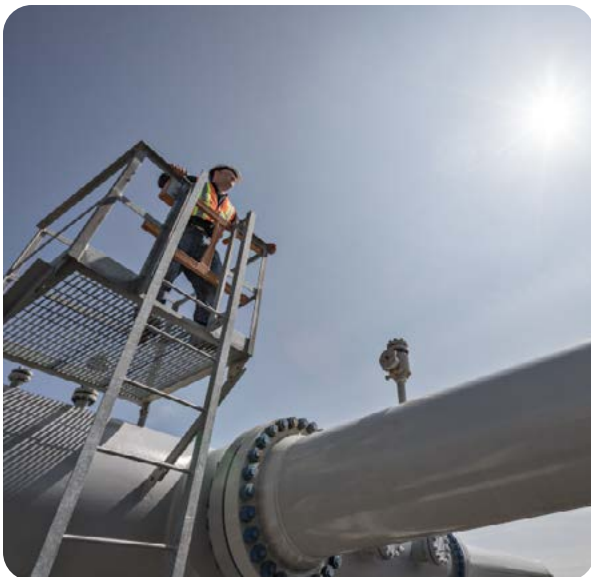
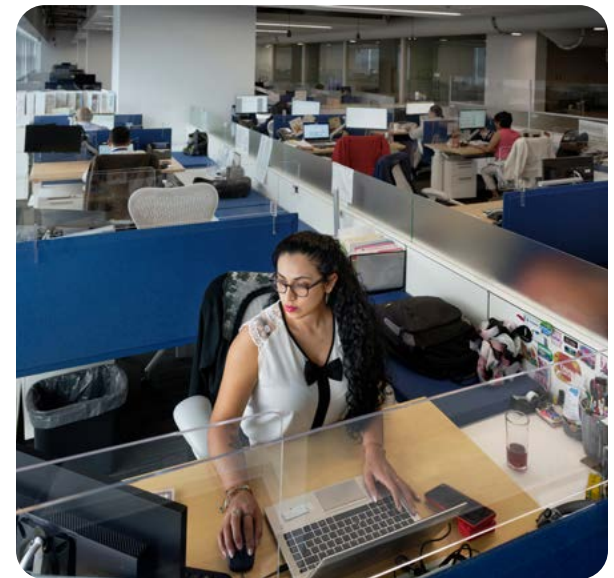
Further integrate and contribute to sustainability

Advance sustainability and innovation across our business and value chain, including our strategic planning and decision-making

Innovation driven optimization pg 81

Incorporate sustainability in enterprise-wide integrated Asset Investment Planning Framework pg 81

Social impact measurement pg 85





CORPORATE AND SUSTAINABILITY GOVERNANCE



TC Energy's Board oversees our sustainability strategy and practices, with primary accountabilities at the Board committee level. The Board has formally adopted and published a set of corporate governance guidelines, a Charter for the Board and for each of its committees, as well as Terms of Reference which set out position descriptions for the Chair of the Board and the CEO. The guidelines and Charters address the structure and composition of the Board and its committees, providing guidance to both the Board and management in clarifying their respective responsibilities.

WANT TO LEARN MORE?

- + [Corporate Governance Guidelines](#)
- + [Charter of the Board of Directors](#)
- + [Terms of Reference for the Chair of the Board of Directors](#)
- + [President and CEO Terms of Reference](#)

Director qualifications

TC Energy's Board includes directors with a range of skills, experience, insights and perspectives to guide our business operations and our long-term strategy. While candidates are nominated as directors based on their background and ability to contribute to the Board and committee meetings, the Board also specifically considers diversity factors. The Board recognizes personal characteristics such as gender, ethnic background, geographic residence and other distinctions when looking at diversity.

WANT TO LEARN MORE?

+ [2024 Management Information Circular](#)

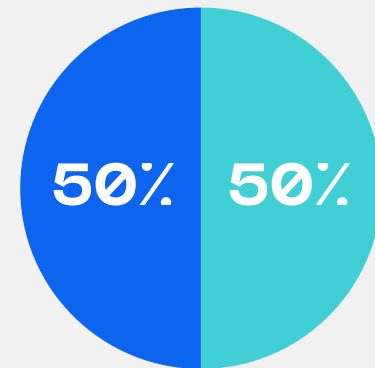
Compensation

Our compensation plan reflects a balanced pursuit of near-term financial performance and sustainable long-term development. The Board's Human Resources committee reviews our compensation program to align it with market practices, keeping it competitive and linking to performance. Each year, we benchmark our programs against emerging governance and peer-group best practices.

TC Energy's internal corporate scorecard is used to align our day-to-day work with our long-term strategy, highlight areas where we are excelling, and identify areas for improvements. Our results are measured to see that we are moving in the right direction and achieving our goals at the end of the year. In our pay-for-performance culture, the corporate scorecard connects TC Energy's performance to employee compensation; employees share in the rewards when the company as a whole is successful.

Since 2022, we have embedded sustainability-related goals into our corporate scorecard to progress and advance our strategic priorities including growth and energy transition. TC Energy's 2024 grant of Performance Share Units (PSUs), a mid-term incentive plan which vests after a three-year period, includes a methane intensity reduction performance metric to support our GHG emissions intensity reduction plan. Safety continues to be an enduring measure in our corporate scorecards, with our 2024 corporate scorecard including a 50 per cent weighting to achieving safety and operational excellence and 50 per cent weighting toward delivering financial results.

Corporate scorecard weighting



- **Achieving safety and operational excellence:** be a leader in the delivery of energy in a safe, responsible and sustainable manner
- **Delivering financial results:** optimize financial performance and grow financial strength and flexibility



Accountability and decision-making

TC Energy's Board guides our sustainability strategy. The Board maintains ultimate oversight over TC Energy's sustainability matters, including risks and opportunities related to material capital project decisions and other matters not specifically overseen by a committee, such as Indigenous relations.

BOARD OVERSIGHT OF SUSTAINABILITY INITIATIVES

Our Board of Directors' primary responsibilities are to foster TC Energy's long-term success and sustainability, oversee our business affairs and management, and to act honestly, in good faith and in the best interests of TC Energy. The Board's main objectives are to promote our best interests, to maximize long-term shareholder value and to enhance shareholder returns. The Board has key duties and responsibilities, but delegates some duties to its four standing committees and discharges others to management to manage the day-to-day affairs of the business.

The Board's four standing committees are composed of entirely independent directors. On January 1, 2024 the standing committee memberships were updated following the appointment of Mr. John E. Lowe as the Chair of the Board.

Audit Committee

The Audit Committee assists the Board in overseeing the integrity of our financial statements and our compliance with legal and regulatory requirements. It is responsible for overseeing and monitoring the accounting and reporting process and the process, performance and independence of our internal and external auditors. The Audit Committee reviews climate change and sustainability-related disclosures in financial disclosure documents and monitors regulatory developments affecting the financial disclosure landscape. It also reviews cybersecurity related risks and the effectiveness of the corporate compliance program.

Governance Committee

The Governance Committee assists the Board in maintaining strong governance policies and practices at TC Energy. Its responsibilities include reviewing the independence and financial literacy of directors, managing director compensation and the Board assessment process and overseeing our strategic planning process and risk management activities. It monitors the relationship between management and the Board, directors' share ownership levels, governance developments and emerging best practices. It is also responsible for identifying qualified candidates for the Board to consider as potential directors. It also recommends the meeting schedule for Board and Committee meetings, site visits and oversees matters related to the timing of our annual meeting. The Governance Committee monitors updates to securities law and proxy advisor policies, while also monitoring Board diversity targets, oversees the risks of forced labour in our supply chain and related disclosures, lobbying practices, shareholder proposals and voting trends.

Health, Safety, Sustainability and Environment (HSSE) Committee

The Health, Safety, Sustainability and Environment (HSSE) Committee oversees operational, major project execution, health, safety, sustainability and environmental risk, including climate change related risks. The HSSE Committee reviews and monitors the performance and activities of TC Energy's HSSE matters including compliance with applicable and proposed legislation, conformance with industry standards and best practices. It also monitors the performance of actions and initiatives undertaken by TC Energy to prevent, mitigate and manage risks related to HSSE matters, and any critical incidents respecting our assets, operations, personnel and public safety. The HSSE Committee also maintains oversight of significant or complex capital projects, including the monitoring of prescribed performance criteria. The HSSE Committee reviews the risk management matrix and voluntary sustainability reporting and disclosure,

and corporate security updates. The HSSE Committee reviews TC Energy's implementation of a safety conscious culture, including emergency preparedness plans, landowner and community relationships, mental health and psychological safety initiatives and Indigenous group engagement. The HSSE Committee receives updates to TC Energy's environmental management program, including biodiversity and land management, climate change related risks and opportunities and GHG emissions reduction targets.

Human Resources Committee

The Human Resources Committee assists the Board with developing strong human resources policies and plans, overseeing the compensation programs and assessing the performance of the CEO and each executive vice-president against pre-established objectives and recommending their compensation to the Board. It approves and, as applicable, recommends to the Board executive incentive awards, and any major changes to the compensation programs and benefits plans for employees. It also reviews the benefits under our Canadian pension plans and share ownership requirements for executives. The Committee oversees TC Energy's Inclusion and Diversity targets and action plan, leadership development and succession planning programs, and clawback policies and it also reviews our overall Corporate Scorecard.

WANT TO LEARN MORE?

- + [Audit Committee charter](#)
- + [Governance Committee charter](#)
- + [Health, Safety, Sustainability and Environment Committee charter](#)
- + [Human Resources Committee charter](#)



BOARD OF DIRECTORS

The Board maintains ultimate oversight over TC Energy’s sustainability matters, including risks and opportunities related to material capital project decisions and other matters not specifically covered in a committee mandate, such as Indigenous relations. The Board also maintains oversight of business strategy alignment, progress against our most significant sustainability objectives and commitments and our overall sustainability communications strategy.

BOARD COMMITTEES

The various Board committees are involved in sustainability issue oversight in their respective areas to ensure a robust management process with appropriate expertise, attention and diligence is given to each key business topic. The committees, comprised entirely of independent directors, receive updates regularly from management.

	AUDIT COMMITTEE	GOVERNANCE COMMITTEE	HEALTH, SAFETY, SUSTAINABILITY AND ENVIRONMENT COMMITTEE	HUMAN RESOURCES COMMITTEE
E	Reviews climate change and sustainability disclosure in financial disclosure documents and monitors regulatory developments affecting financial disclosure.		Receives updates to TC Energy’s environmental management program, including biodiversity and land management, climate change related risks and opportunities and GHG emissions reduction targets.	
S		Monitors TC Energy’s Board diversity targets, lobbying practices and information on climate-related management and shareholder proposals and voting trends.	Reviews TC Energy’s implementation of a safety conscious culture, including emergency preparedness plans, landowner and community relationships, mental health and psychological safety initiatives and Indigenous group engagement.	Oversees TC Energy’s Inclusion and Diversity targets and action plan, leadership development and succession planning programs, and employee engagement levels.
G	Oversees financial risk management, financial reporting, auditor independence and the execution of internal and external audits as well as cybersecurity and related risks and the corporate compliance program requirements, structure and results.	Monitors updates to securities law and proxy advisor policies, reviews Board skills matrices and enterprise risk management program implementation.	Reviews risk management matrix, voluntary sustainability reporting and disclosure, and corporate security updates.	Reviews executive compensation levels, employee compensation and benefits programs, leadership development and executive level succession planning programs and reviews overall Corporate Scorecard.

EXECUTIVE LEADERSHIP TEAM (ELT)

Responsible for developing and implementing TC Energy’s strategy including integration of sustainability matters into decision-making and financial plans and advancing strategic priorities including growth and energy transition.

CHIEF FINANCIAL OFFICER (CFO, MEMBER OF THE ELT)

Imparts governance and financial stewardship to provide timely and complete financial information reported to external stakeholders, while aligning business and financial strategies to maximize shareholder value and instilling a strong culture of cost control.
Responsible for our financing decisions and maintaining relationships with our investor base, the accuracy and integrity of our financial statement disclosures, and monitoring and preparing for mandatory reporting requirements in the multiple jurisdictions in which we operate.

CHIEF SUSTAINABILITY OFFICER (CSO, MEMBER OF ELT)

Provides strategic leadership of sustainability-related issues such as climate change, energy and resource conservation, environmental stewardship, stakeholder issues and awareness.
Responsible for directing the coordination, communication and management of sustainability-related issues, including climate change, particularly the intersection of risk, governance, environmental and social issues.

CHIEF RISK OFFICER (CRO, MEMBER OF ELT)

Centralizes a pragmatic approach to facilitating the annual enterprise risk assessment and management of the enterprise risk register.
Responsible for ensuring the enterprise risk management (ERM) program governance model, framework and processes are established, properly documented and maintained in a manner that is suitable for our culture and operating model.

MANAGEMENT

Integrating sustainability strategy and risk management into daily functional and operational accountabilities, developing, overseeing and implementing corporate initiatives, policies, and processes, and measuring the performance and success of programs.

EMPLOYEES

Continued contribution to organizational success through adherence to policies, and upholding corporate values of safety, responsibility, collaboration, integrity and innovation in a socially responsible and ethical manner.



In 2023, the Board of Directors and/or its committees:

- received comprehensive deep dives of our enterprise risks and emerging risks, as they arise
- received two in-depth educational sessions with external speakers, covering the topics of geopolitics, markets and energy transition and economic, energy and climate security
- monitored financial reporting, legal and regulatory developments affecting our financial reporting process, controls and disclosure, including climate-related financial disclosure
- reviewed climate-related management and shareholder proposals and voting trends
- reviewed lobbying policies, activities, and expenditures
- reviewed the Board Diversity Policy with information on investor expectations, proxy advisor firms and peer practices on diversity targets
- monitored the effectiveness of HSSE policies, management systems, programs, procedures and practices through the receipt of reports on ongoing improvement and simplification initiatives, including improvements to TC Energy's Operational Management System (TOMS)
- reviewed status of critical incidents, root cause analysis and incident follow-up
- oversaw corporate compliance program requirements, structure, and results, including foreign corrupt practices and anti-bribery statutes and policies
- monitored updates to Canadian and U.S. air emissions and greenhouse gas legislation, climate change initiatives and related compliance matters for impacts to TC Energy
- received and reviewed regular updates on the progression of TC Energy's sustainability commitments and oversaw TC Energy's voluntary disclosure on HSSE sustainability matters
- received and reviewed updates on the progression of engaging with Indigenous groups including TC Energy's Reconciliation Action Plan

The Board also participates in an annual strategy session to evaluate and, if appropriate, update our extended five-year strategic plan, including salient risks that could affect execution of the company strategy. As part of this annual review, management includes an assessment of energy fundamentals, the competitive environment and the stakeholder landscape to identify opportunities and threats to our business strategy.

MANAGEMENT OVERSIGHT

Management's sustainability governance framework includes the Chief Sustainability Officer (CSO), Chief Risk Officer (CRO), Chief Financial Officer (CFO), and a dedicated Sustainability Management Committee.

The President and CEO position is the highest level of executive leadership with responsibility for sustainability-related risks and opportunities. This position is responsible for the company's overall leadership and vision in developing strategic direction, values and business plans and has overall responsibility for operating and growing our business while managing risk, including climate change risks, to create long-term sustainable value for our shareholders.

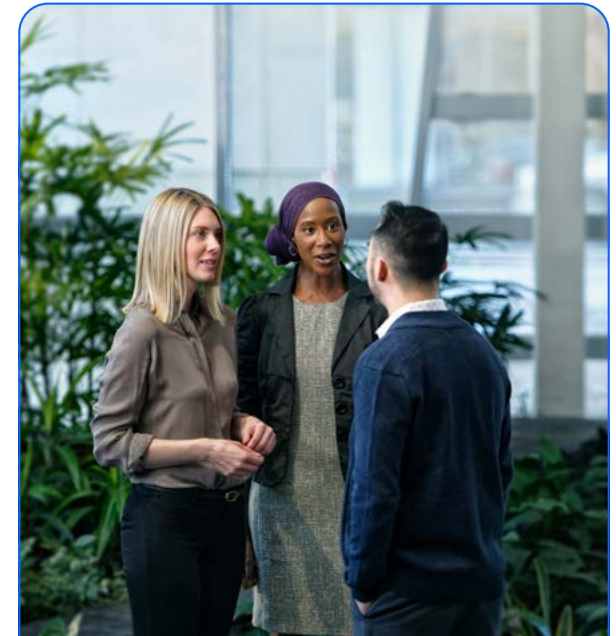
The CFO is responsible for our financing decisions and maintaining relationships with our investor base. This includes proactive engagement with the investment community, including credit rating agencies, with the objective of hearing their feedback and keeping them apprised of developments in our business and factually communicating our prospects, risks, and challenges, including those related to sustainability, which remains a consideration in determining strategy, capital allocation and engagement with capital markets. The CFO and the CSO collaborate to provide transparent and reliable sustainability communications, reports and disclosures to our stakeholders.

The CSO provides strategic leadership of sustainability-related issues such as climate change, energy and resource conservation, environmental stewardship, stakeholder issues and awareness at the highest level of TC Energy. The CSO is responsible for directing the co-ordination, communication and management of sustainability-related matters, including climate change, particularly the intersection of risks and opportunities, governance, strategy, and environmental and social issues. Part of the CSO role includes monitoring and preparing for mandatory reporting requirements in the multiple jurisdictions in which we operate.

The CRO centralizes a pragmatic approach to facilitating the annual enterprise risk assessment and management of the enterprise risk register. The CRO is focused on prioritizing risks, clarifying roles and responsibilities, improving Board and management oversight and providing the Board with quarterly in-depth presentations on enterprise risks, including climate-related risks. The CRO is responsible for ensuring that the enterprise risk management (ERM) program governance model, framework and processes are established, properly documented and maintained in a manner that is suitable for our culture and operating model. The CRO also reports enterprise risks and emerging risks to the Board and the Governance Committee from time to time and engages with the Board to obtain their insights for identification of enterprise risks.

Currently, the CSO, Chief Compliance Officer and CRO roles are held by the same individual, which creates alignment in the oversight of sustainability, compliance and enterprise risks.

To enhance our overall governance structure, we have evolved our HSSE corporate management committee into two separate committees that report to the Board HSSE Committee. The Sustainability Management Committee provides strategic leadership and direction on sustainability issues, while the Operating Committee is responsible for making enterprise decisions in support of management system governance, strategic system enhancements and operational risk management related to safety and select environmental considerations.



Sustainability Management Committee

In July 2023, TC Energy launched the Sustainability Management Committee to foster cross-functional alignment on sustainability goals and commitments. The committee, comprising senior leaders, meets regularly to examine environmental, social, and governance issues in relation to current policies and industry best practices. This review process informs new initiatives that support TC Energy's broader sustainability strategy, ensuring the integration of sustainability principles across the company's operations and projects. The Sustainability Management Committee's mandate is to drive unified action on TC Energy's sustainability objectives throughout the organization.

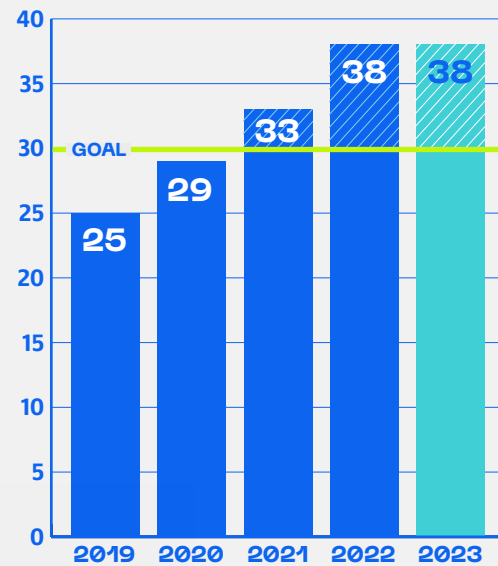


Board diversity

TC Energy has been working towards a more diverse Board since 1999. In February 2024, the Board approved amendments to the Board Diversity Policy to add a new target of at least one racially and/or ethnically diverse member on the Board. Racially and/or ethnically diverse members includes both Aboriginal peoples⁴² and members of visible minorities⁴³. Currently, two of 13, or 15 per cent, of the Board is composed of members of visible minorities and there are no Aboriginal peoples currently serving on the Board. There are no persons with disabilities currently serving on the Board.

While appointments will always be based on merit and the capacity to fulfil the fiduciary duties of a public company director, we will consider skills, industry experience and expertise, in addition to the age, gender, ethnicity, disability status and other personal attributes of candidates. If necessary, the Governance Committee may engage an independent third party to identify and assess candidates that meet the Board's skills and diversity criteria.

Women on board (%)



OUR TARGET: 30 per cent women on our Board of Directors.

STATUS: Pursuant to the Board diversity policy, the Board has a target of at least 30 per cent women. Further, if the Board composition falls below the target of 30 per cent women on the Board, the Governance committee will commit to increasing the gender diversity up to the target by the next annual meeting of shareholders. Currently, five of 13 (38 per cent) Board members are women.



NEW METRIC & TARGET

METRIC: Diversity of our Board of Directors

TARGET: At least one member who identifies as racially and/or ethnically diverse⁴⁴.

[WANT TO LEARN MORE?](#)

[+ Board Diversity Policy](#)

⁴² Aboriginal peoples means persons who are Indigenous, Inuit or Métis.

⁴³ Visible minorities means persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.

⁴⁴ Racially and/or ethnically diverse members includes Aboriginal peoples (means persons who are Indigenous, Inuit or Métis) and members of visible minorities (means persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour).





ADVANCING SUSTAINABILITY AND INNOVATION



Sustainability imperatives force TC Energy to examine its business from multiple perspectives. This process serves as a catalyst for new thinking that can deliver enhanced shareholder value by uncovering alternative value propositions, business models, and growth opportunities.

Embracing sustainability as a driver of innovation is a part of TC Energy's strategic approach. By proactively addressing sustainability considerations, TC Energy is positioning itself to capitalize on emerging opportunities and overcome challenges, ultimately creating value for shareholders and stakeholders alike.



OUR TARGET: Achieve \$115 million to \$120 million in capital and operating optimization and revenue opportunities by continuously improving our processes and systems by the end of 2023⁴⁵.

STATUS: Between 2019 and 2023, over \$95 million of capital and operating optimization and revenue opportunities have been realized. Our Realtime Asset Monitoring Program grew significantly in 2023 with more staff and equipment coverage, leading to an increase in cost avoidance realized in 2023 as compared to 2022. We continue to benefit from implementing previously identified efficiencies.

\$95M



OUR TARGET: By end of 2023, pilot various measures⁴⁶ to express sustainability value across all business units.

STATUS: The Integrated Asset Investment Planning (IAIP) framework leverages our enterprise risk framework to identify opportunities to further improve safety, environmental performance, reliability, compliance, and stakeholder relations. The process allows TC Energy to maximize our asset lifecycle value and prioritize projects aligned with our sustainability objectives. We successfully piloted measures to express value in programs through drivers such as reliability, safety, and environmental risk reduction. The pilot assessed sustainability value across business units and identified opportunities to improve. Refinements to the IAIP framework will continue to be made as it is integrated into our operational and maintenance planning.



OUR TARGET: By end of 2024, determine portfolio sustainability contributions, informing future planning decisions aligned to corporate and business unit objectives.

STATUS: Having successfully piloted the framework to measure sustainability value in our business units, we identified the benefits our Integrated Asset Investment Planning (IAIP) framework can achieve and opportunities to further integrate IAIP into our operational and maintenance portfolio management process. In 2024, we are focused on establishing sustainability value baselines that can be used to expand the utilization and improve the consistency of the framework.

IN PROGRESS

NEW METRIC & TARGET

METRIC: Optimize operational and project effectiveness and efficiency through organizational, digital and technological innovations.

TARGET: Achieve \$10M to \$15M in capital and operating optimization and revenue opportunities by continuously improving our processes and systems in the 2024.



⁴⁵ Further detail about this target can be found in [Appendix: Performance data](#)

⁴⁶ Asset Management measures include, but are not limited to, reliability, and safety and environmental risk reduction.



Enhancing energy sector sustainability with technology

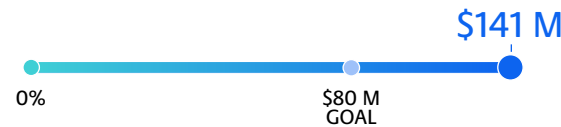
TC Energy invests an average of \$8 million per year in research and development (R&D) projects to enhance the safety, efficiency, and reliability of its assets and operations. In 2023, this R&D investment grew to over \$13 million, with additional funds being directed towards priority research on small and large diameter in-line inspection technology projects.

The direction of our R&D investments remain focused on three priority areas: asset integrity performance, cost competitiveness and supporting the energy transition. TC Energy's technical R&D efforts are building capabilities to support the company's role in the evolving energy landscape as it pursues advances in the energy transition while our portfolio of R&D investments is positioned to deliver value for decades to come.



OUR TARGET: \$80 million per year engineering R&D in value creation⁴⁷.

STATUS: In 2023, we exceeded this target by generating a total value of \$141 million from our focused engineering research and technology development program. Collaboration with our industry partnerships has enabled us to advance our technologies and engineering knowledge to continuously improve asset safety and reliability.



SATELLITE MONITORING USING HYPERSPECTRAL SENSORS

TC Energy supports innovative leak prevention and monitoring technology development through strategic partnerships. The Intelligent Pipeline Integrity Program (iPIPE), with TC Energy as a member, has successfully launched three satellites with Orbital Sidekick. These satellites are equipped with hyperspectral sensors that can detect, quantify, and discriminate between gases like carbon dioxide and methane, as well as liquid releases, using 500 colour bands. The results so far are promising, with this launch enabling leak detection testing performance from space.

⁴⁷ 'Value creation' includes value realized through engineering R&D initiatives implemented in our programs. Engineering R&D creates accuracy, precision, and efficiency in decision-making tools and processes which creates smarter and sharper decisions that enable both safety and economy leading to sustainability.



Participation in research partnerships

With our sights set on the future, we continue to collaborate and partner with organizations inside and outside the energy industry, including:

- [Pipeline Research Council International \(PRCI\)](#), is a community of the world's leading pipeline companies established to develop and deploy research solutions improving pipeline and performance.
- PIPESAFE International Group (PSG) is an international collaboration of gas transmission companies studying the hazards and risks involved in gas transmission by pipelines.
- [Emerging Fuels Institute \(EFI\)](#), of which we are a founding member, is addressing the most pressing knowledge gaps in hydrogen and CO₂.
- [Intelligent Pipeline Integrity Program \(iPIPE\)](#) is focused on advancing detection of pipeline hazards and leaks.



Pipeline Research Council International awards TC Energy for 50-year contribution

In 2023, PRCI acknowledged 50 years of commitment and dedication to industry-leading international research by awarding TC Energy the 2023 PRCI In-Kind Support Award. This award is given to companies that go above and beyond to support advancements in pipeline research. TC Energy has made major contributions to many PRCI projects and programs by sharing employee expertise, data, pipe samples, access to operating pipelines, and equipment for field data collection.



SUPPLY CHAIN GOVERNANCE



As a major infrastructure company, TC Energy's purchasing power has considerable impact through our network of over 4,000 qualified suppliers. We have well-defined processes for supplier qualification, suspension, and performance management. We use a contractor management platform to identify and engage with suppliers that meet or exceed our minimum requirements for safety, quality and the environment. Additional factors assessed include technical capability, quality benchmarks, financial capability, anti-corruption practices, as well as local, diverse and Indigenous contracting, safety and environmental protection practices.

Once a supplier is onboarded, they become a TC Energy contractor. TC Energy's Contractor Code of Business Ethics (COBE) Policy sets high standards for contractors, covering areas such as ethical conduct, health and safety, employment equity and stakeholder relationships.


To monitor and manage sustainability performance across its supply chain, TC Energy is implementing a third-party sustainability management and intelligence tool. This allows the company to assess risk and identify opportunities for continuous improvement through its value chain by evaluating and monitoring contractor performance.

Embedding sustainability in our procurement strategies

In 2023, TC Energy created a new team within the supply chain function to further integrate sustainability into its procurement strategies. The team's mandate is to monitor compliance with TC Energy policies and standards, establish effective reporting and adopt industry best

practices to leverage our market presence and encourage sustainable practices throughout TC Energy's value chain. Supplier diversity is a key focus area for this team and we expect further maturation of our diverse supplier spend data management practices in 2024.



 **WANT TO LEARN MORE?**

- + [Contractor COBE Policy](#)
- + [Doing business with us](#)



SOCIAL IMPACT MEASUREMENT



In 2023, we set a new target to start implementing a social impact measurement framework to better measure the impact of our community and workforce giving dollars. This framework is designed to maximize the positive difference TC Energy makes in the communities it serves.

This process began with an analysis of our community investments over the past two years. This review confirmed that TC Energy's four giving focus areas - safety, education, environment and resilient communities - remain strategically aligned and impactful. We then established key performance indicators (KPIs) for each focus area to measure the community investment performance. Community partner applications now request desired outcomes tied to these KPIs. We will follow up with our community partners to complete post-grant reporting to evaluate the actual outcomes against the desired outcomes.

This structured approach provides transparency for community partners, empowering their understanding of TC Energy's strategy and grounding our internal decision-making towards high-impact investments.



OUR TARGET: Commence implementation of a social impact measurement framework and establish a baseline in 2024. Launch social impact metrics and targets in 2025.

STATUS: In January 2024, social impact metrics were launched with the opening of this year's grant application. Grant applicants must provide anticipated impact data for the KPIs corresponding to our investment strategy. Data will be analyzed at the end of 2024 to set targets for 2025 and beyond.

IN PROGRESS



BUSINESS ETHICS AND COMPLIANCE



We are committed to doing business with integrity, every day. To meet this commitment, our workforce must act ethically, fairly, honestly and respectfully.

If we are to be successful as a company, we depend on individuals to have a clear understanding of their duty to fulfill the highest standards of business conduct. Accordingly, our COBE Policy applies to all employees, directors, officers and contingent workforce contractors. It also applies to TC Energy and its subsidiaries worldwide. The COBE Policy sets the bar for behavioural requirements and expectations and it guides our daily business actions and decisions.

WANT TO LEARN MORE?

- + [Our Governance](#)
- + [COBE Policy](#)



Safe space for non-compliance reporting

TC Energy personnel and contractors are required to report any actual or suspected violation of the law or COBE Policy, including those in the context of forced labour and child labour, and all health, safety and environment related hazards, potential hazards or incidents, as soon as they become aware, so they can be addressed appropriately.

Personnel have several ways to report an issue depending on the nature of the incident, including the use of [TC Energy's Ethics Help Line](#) — a safe, secure, and confidential 24/7 help line system with the option to report anonymously. The Ethics Help Line is operated by an external, independent provider and reports can be submitted online or via telephone by all TC Energy stakeholders. Regardless of the means used to report, all reports are confidential, taken seriously and will be investigated and addressed appropriately. We take every report seriously and provide immunity from disciplinary action for good faith reporting of a concern.

Company personnel must complete annual COBE Policy training and certify they have read, understood and agree to abide by the COBE Policy. TC Energy's Ethical Decision-Making guideline and other resources on how to raise a concern, how to reach their Compliance Coordinator, and each individual's responsibilities are covered in the COBE Policy.



Enterprise Ethics and Compliance Committee

TC Energy's Enterprise Ethics and Compliance Committee (EECC) advises and provides direction for the oversight and continuous improvement of the organization's Ethics and Compliance Program. EECC members are responsible for compliance performance in their own areas of responsibility and must take an active role to facilitate resolution of compliance performance issues.

The program identifies and addresses the Company's existing and emerging ethics and compliance risks to manage consistency across the organization. It also looks at our compliance with policies, applicable laws, regulations and other legal requirements in all jurisdictions where TC Energy operates, including TC Energy's COBE Policy, Corporate Policies, the Canadian and Mexico Codes of Conduct, and U.S. Federal Energy Regulatory Commission (FERC) Standards of Conduct.

The role of the EECC includes:

- fostering, promoting and incenting a culture that encourages ethical conduct and legal compliance
- overseeing consistent implementation of the Compliance Program
- coordinating objectives, holding functions accountable, and sharing information
- verifying the Compliance Program is appropriately resourced and effective
- reviewing top legal and regulatory risks, and recommending program changes
- reviewing the periodic assessment and prioritization of the organization's greatest legal and regulatory risks, and recommending program changes
- providing advice and direction on compliance matters, trends and corporate policies

The EECC plays a central role in fostering strong ethics and compliance practices across TC Energy's operations.

Public policy and lobbying

As a North American energy infrastructure company, our industry plays a critical role in shaping a sustainable future. We are dedicated to constructive engagement with lawmakers, regulatory bodies, and a diverse range of stakeholders.

Public policies — whether guidelines, rules, legislation, regulations, laws, principles or directions — guide our actions. TC Energy monitors changes to public policy that affect our business and we advocate our position on key policy issues. When determining our advocacy priorities we consider whether they affect multiple lines of business and/or jurisdictions; have significant financial, operational or reputational implications to the company; are of significant relevance; or are politically sensitive within TC Energy's current business context.

We aim to maintain positive and constructive relationships with stakeholders, including local communities, federal, state/provincial, and municipal government officials, and business associations. These relationships give us appropriate visibility externally and allow us to effectively manage emerging risks that affect our company and the broader industry.

TC Energy's recognition as an energy partner of choice depends on the strength of our reputation. Transparent, fair engagement with stakeholders on our projects and our safe, reliable operation of assets is important to gaining and maintaining trust and respect. Through this, we are better positioned to obtain government and community support for our activities, initiating meaningful local benefits while protecting and enhancing our brand.

Our **Government Relations** teams advance our business objectives by identifying key issues, opportunities, and risks within all levels of government. They collaborate closely with government contacts to support our North American portfolio of projects and operations.

Our **Community Relations** teams facilitates the two-way exchange of information on our projects and operations with local communities. This supports activities such as relationship management, regulatory compliance, community investment, damage prevention, and public awareness.

The **Public Policy and Insights** team is responsible for the coordination, development, and advocacy of TC Energy's corporate positions on key public policy issues across North America.

We believe that greater collaboration between governments and businesses is essential to building the best framework to tackle environmental challenges, understanding that regulations—when crafted thoughtfully—can spur investment and innovation. To that end, we continue to engage with governments across Canada, the U.S., and Mexico in the development of responsible public policy and regulatory processes.



Engagement efforts in areas we currently consider relevant include, but are not limited to:

POLICY FOCUS	OUR EFFORTS	OUR VIEWS
PERMITTING REFORM	We continue to engage with various levels of government in Canada and the U.S. to accelerate the regulatory process in an effort to enable more efficient development of needed infrastructure.	We must have clear and predictable regulatory frameworks that encourage investment in emissions reductions while balancing economic prosperity and energy security.
CLEAN ENERGY INVESTMENT POLICIES	We are expressing our support for tax policies that incentivize early investment in clean energy systems.	We support and appreciate the latest progression of U.S. and Canadian investment incentives to foster energy technology and innovation.
PIPELINE SAFETY	We are engaged with various levels and agencies of the government in the U.S. to advocate for updates to pipeline safety regulations that promote the highest standard of safety and reduce unnecessary emissions. In Mexico, we continue to advocate for improved first responder capabilities and public awareness best practices with Mexican officials.	Safety is our number one value, and we believe that risk-based safety regulations across our entire North American asset base will allow us to make progress towards zero incidents while lowering emissions.
EMISSIONS MANAGEMENT	There are several new or evolving initiatives and policies across North America at the local, state or federal levels aiming to reduce GHG emissions. We actively monitor and, where appropriate, submit comments to regulators as these policies are implemented.	We are actively sharing our over 70 years of expertise and experience with methane leak detection and reduction technologies, as well as contributing to research and development to reduce GHG emissions.
INDIGENOUS	The 2024 Canadian Federal Budget introduced a Federal Indigenous Loan Guarantee, that is sector agnostic, to facilitate Indigenous equity ownership in major resource projects. TC Energy has been a proponent for Indigenous loan guarantee opportunities and engaged in sharing our work in Indigenous equity partnerships.	Indigenous Communities need to be able to share in the benefits of natural resource and energy projects in their territories and on their own terms. Indigenous Communities have fewer options for securing capital or leveraging existing assets as collateral, leading to increased borrowing rates that create a barrier to equity investment in natural resource and energy projects.

 **WANT TO LEARN MORE?**

+ [2023 Annual Report: Existing jurisdictional policies](#)

We recognize that harmonizing North American regulatory policies and improving cross-border cooperation are pivotal to the collective effort of decarbonizing our economies, while maintaining our pledge to deliver consistent, cost-effective, and reliable energy.

We will continue to advance our work toward improved coordination on climate and energy policy across North America's national jurisdictions. By better leveraging our shared resource base and energy connectivity, we can make meaningful progress to reducing GHG emissions globally.



Trade association alignment

TC Energy is a member of trade associations focused on energy industry issues and the interests of our stakeholders. Our participation in these associations exposes us to differing views and enables us to obtain feedback, share our experience and inform the development of cohesive legislation and regulations. Some of these associations also engage in lobbying activities.

We believe that our indirect lobbying activities through these associations are consistent with a transition to a lower-emission energy system and generally align with our positions on sustainability issues, including the aspirational pursuit of limiting global temperature increase to 1.5°C and other sustainability topics.

Trade association policies generally reflect a compromise of the membership, so at times the policy positions and lobbying activities of these associations may not fully align with our positions on a particular issue, in which case we work to mitigate risks associated with such misalignment. In such cases, we expect to engage further with these trade associations to understand their positions better and assess whether formal company participation or endorsement should continue.

As communicated in our July 2023 Report on Climate-related Lobbying, we confirm that since the publication of the climate-related lobbying report, there has been no change to our association memberships⁴⁸ or alignment assessment.

 [WANT TO LEARN MORE?](#)

[+ Report on Climate-related Lobbying](#)

Political engagement

Political contributions by corporations are not permitted in Canada except in Saskatchewan, where we contributed \$8,495 to political events in 2023.

In the U.S., subsidiaries of TC Energy make corporate political contributions as permitted by law. Our U.S. employees can also make voluntary contributions to the TransCanada USA Services Inc. Political Action Committee (TC PAC), which is a separate segregated fund, supported only by contributions from U.S. employees⁴⁹.

ABOUT THE U.S. TC PAC

Our political action committee, TC PAC, plays a critical role in our government relations strategy. TC PAC empowers employees in the U.S. to participate in the political process by making political contributions to candidates for public office. The energy industry has champions as well as opponents; TC PAC supports those champions in a non-partisan way with contributions to both major parties and independents. We support those who support our industry and are aligned with our goals for a responsible, secure and affordable energy sector.

TC PAC is the primary vehicle for our company's U.S. employees to be able to impact campaigns. Participation in the PAC is voluntary and employees have the right to refuse to contribute. PAC membership is only available for U.S. citizens and permanent legal residents. TC PAC is officially registered as TransCanada USA Services, Inc. Political Action Committee. TransCanada USA Services, Inc. is the employer of all TC Energy Corporation personnel in the U.S. and is a subsidiary of TC Energy.

⁴⁸ Memberships in which annual dues paid were \$50,000 or greater and the organization is likely to take a position on climate change and/or energy advocacy.

⁴⁹ Further details about our political contributions can be found in Appendix: Performance data



ENTERPRISE RISK MANAGEMENT



Sustainable businesses must assess their risk exposure across short-, medium-, and long-term horizons. At TC Energy, our risk management strategy is directly aligned with our core business objectives and the level of risk we are willing to accept. Our Enterprise Risk Management (ERM) program systematically identifies, analyzes, and evaluates enterprise risks, including sustainability-related risks, that could materially impact the achievement of our objectives. The ERM program also delivers enterprise risk reporting to the Board, CEO, and executive vice-presidents, including the CRO.

As part of its mandate, the Board has a fiduciary duty to oversee risk management. It is responsible for prioritizing and managing risks in alignment with TC Energy's defined risk appetite and tolerances. On an annual basis, the ERM program provides the Board with TC Energy's Enterprise Risk Register, and heat map for review and approval. The risk register includes enterprise risks grouped into risk themes, and encompasses risks pertaining to:

- safety and operations, including cybersecurity
- legal, regulatory, and compliance
- capital allocation and finance, including strategy- and competition-oriented risk
- project execution
- human resources and talent.

While the Board is accountable for overseeing all risk areas generally, Board Committees are tasked with providing oversight for specific risk types.

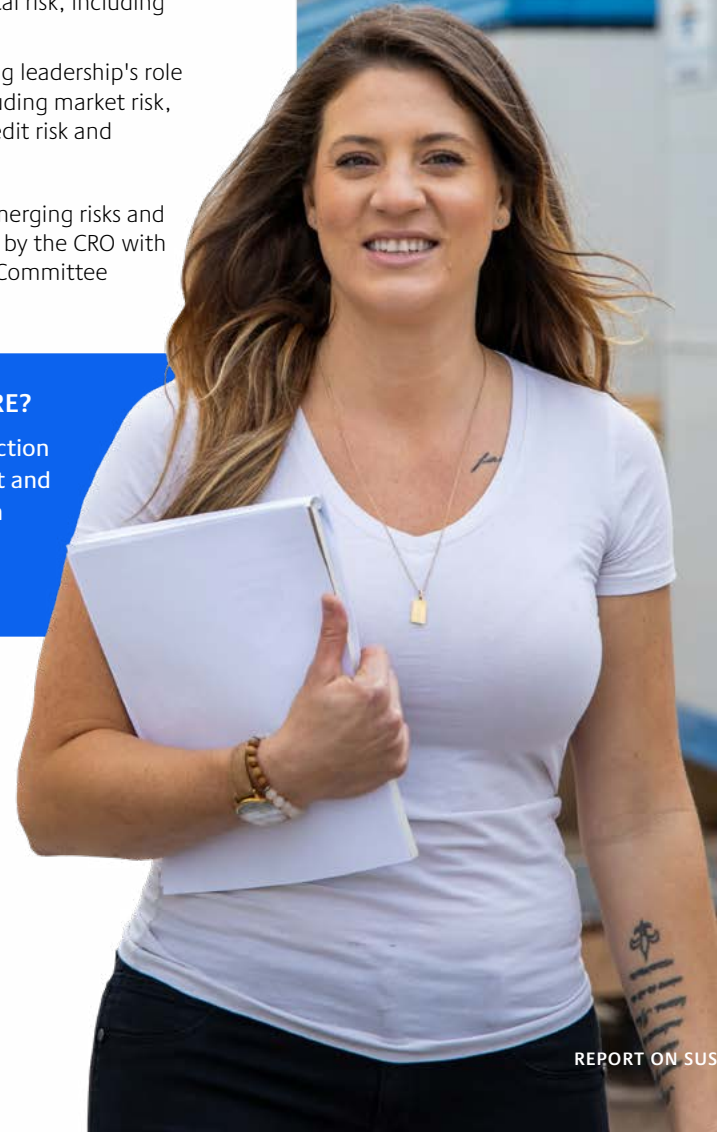
TC Energy's Board Committees include:

- The Human Resources Committee overseeing executive resourcing, organizational capabilities and compensation risk
- The Health, Safety, Sustainability and Environment Committee overseeing operational, health, safety, sustainability, and environmental risk, including climate-related risks, and
- The Audit Committee overseeing leadership's role in managing financial risk, including market risk, insurance risk, counterparty credit risk and cybersecurity

Additionally, the Board reviews emerging risks and management responses prepared by the CRO with support of the Management Risk Committee (MRC) on a quarterly basis.

WANT TO LEARN MORE?

+ See our comprehensive section outlining our risk oversight and enterprise management in our [2024 Management Information Circular](#)





Privacy and information security

At TC Energy, we understand that our stakeholders expect high standards of confidentiality in their relationships with us. To address the growing threat of extortion and reputational damage, we have robust information security practices in place to protect private information.

Our Privacy Statement and Protection of Personal Information Policy outline how we safeguard personal data and comply with privacy laws in the regions where we operate. This policy also guides us in assessing privacy risks when developing or modifying our systems, solutions, applications, and surveys.

To oversee our privacy practices and compliance with jurisdictional legislation, we have appointed a Chief Privacy Officer (CPO) who is responsible for ensuring a fair, honest, and ethical approach to collecting, storing, and using personal information. The CPO leads our Privacy Office and a team of privacy advisors, all of whom maintain or are working towards globally recognized privacy certifications with the International Association of Privacy Professionals.

The Privacy Office is tasked with fostering a culture of privacy across our organization. This includes setting policies and standards for handling personal data from our customers, employees, landowners, and other stakeholders. Additionally, our enterprise-wide Privacy Committee meets regularly to stay informed on privacy matters.

MAKING CYBERSECURITY BUSINESS-CRITICAL

Alongside our focus on privacy, TC Energy recognizes the growing threat of cyberattacks as a critical business risk. As our North American infrastructure is essential to the energy security of three nations and millions of citizens, its digital security is just as vital as its physical security.

TC Energy's Chief Information Security Officer (CISO), who manages the Cybersecurity Office, is responsible assessing our vulnerabilities, testing our resilience, and modifying our policies and technology systems to prevent breaches. Recognizing the importance of collaboration, the Cybersecurity Office works closely with governments, regulatory agencies, and industry experts to anticipate and address new cyber threats. Our approach is one of constant vigilance, with a cautious and conservative posture for the utmost protection.

To further strengthen our cybersecurity, we have implemented ongoing employee and contractor training and awareness campaigns to educate our workforce on the dangers of cyberattacks. By taking a proactive and comprehensive approach to digital security, we are committed to safeguarding our critical energy infrastructure for the benefit of the communities we serve.

Chief Privacy Officer Kate Bilson

In 2018, following the retirement of a predecessor, TC Energy appointed Kate Bilson as Chief Privacy Officer. One year later, TC Energy's formal Privacy Office was introduced. Ms. Bilson is responsible for TC Energy's privacy program which safeguards all the personal information we collect from personnel and external stakeholders. Her appointment signals the recognition of a new era in privacy regulation with the possibility of severe reputational damage, as Canada, the E.U. and various U.S. states could impose significant financial penalties and even criminal charges.

TC Energy believes that legislation to protect personal information will be instrumental in this digital era and seeks not just to comply with regulations but to preempt non-compliance through an approach of 'privacy-by-design'.



Privacy-by-design is the most effective way to manage ever-evolving privacy law requirements. Privacy-by-design is about collaborating early on in a proposed new IS solution or business objective and providing the best long-term experience for stakeholders."

KATE BILSON

Chief Privacy Officer and Manager of the Privacy Office

WANT TO LEARN MORE?

+ [Privacy Statement](#)

+ [Protection of Personal Information Policy](#)



Proactively protecting digital assets

Cyberattacks pose significant risks to TC Energy and the broader energy infrastructure industry. As such, cybersecurity is a top priority that is overseen directly by our CISO, who reports quarterly to our Board of Directors.


Our cybersecurity strategy is regularly reviewed to validate the sustained safety, security, and resilience of our digital assets. This strategy is aligned with regulatory and industry standards, including requirements from the Transportation Security Administration, Canada Energy Regulator, and North American Electric Reliability Corporation. We also adhere to cybersecurity best practices outlined by the National Institute of Standards and Technology. TC Energy's comprehensive cybersecurity program encompasses policies, threat monitoring, external assessments, insurance coverage, and ongoing employee training. This multilayered approach is designed to proactively identify and mitigate cyber risks across our operations.

WANT TO LEARN MORE?


+ [Cybersecurity Policy](#)

+ [Acceptable Use Policy](#)

Cybersecurity regulatory update



The Government of Canada brought forward Bill C-26, a new cybersecurity bill that will require mandatory reporting of cyberattacks against systems of critical importance to Canadian interests. Bill C-26 will bring into force the Critical Cyber Systems Protection Act (CCSPA) which provides a framework for the protection of cyber systems that are vital to Canada's national security or public safety. The bill received its second reading in March 2023.



The U.S. Transportation Safety Administration (TSA) is an agency of the U.S. Department of Homeland Security. In response to the ongoing cybersecurity threats to pipeline systems, the TSA has issued security directives that require owners and operators of critical pipelines to implement a number of protections against cyber intrusions. Since many of TC Energy's Information Systems are integrated across the business, the security directives affect the entire organization. In response, we are updating cybersecurity policies and procedures. TC Energy continues to meet the requirements of the TSA Security Directives and in 2024 completed our inspection with the TSA resulting in zero findings.



Operational management system

TC Energy's proprietary management system, TOMS, has been an integral part of TC Energy's de-risking strategy, incorporating industry best practices and standards, such as ISO and OHSA, as well as undergoing periodic audits by the Canadian Energy Regulator (CER). The enterprise-wide system covers health, safety, the environment, stakeholder engagement and operational integrity across our asset lifecycle. As TOMS has grown, it has become more complex. In 2023, we began a process to streamline and simplify its use.

TOMS: STRENGTHENED AND STREAMLINED

The goal in 2023 was to make TOMS simpler to use for frontline employees making decisions on safety, efficiency and productivity in their day-to-day activities and operations. The new TOMS has reduced the number of individual requirements from 1,400 to 94, with the introduction of 14 more comprehensive elements.

The project is in the baseline assessment phase across all business units in 2024. Gap closure plans and implementation efforts will begin after the baseline assessments are completed.



CUSTOMER EXPERIENCE AND SATISFACTION



Customer experience is a journey, and each interaction leaves an impression of what it's like to do business with us. The perspective of our customers is a unique asset to a business that covers different geographies and jurisdictions.

Our understanding of customers' needs and concerns is based on regular one-on-one meetings. We also attend conferences and industry events to gather information on a variety of issues and to stay up to date on industry trends and best practices. Increasingly, data analytics from multiple sources offer fresh insights into our operations leading to better service for customers.





APPENDIX

IN THIS SECTION

- 99** Performance data
- 124** Content indices
- 163** Stakeholder Engagement
- related policies, guiding principles and documents
- 164** Forward-looking information



PERFORMANCE DATA

Our goal is to address the information needs of our stakeholders by providing clear and useful sustainability-related data.

- Performance data represents the period of January 1 to December 31, 2023, or status as of December 31, 2023, whichever is applicable, unless otherwise noted.
 - Performance data is included for the five years ending December 31, 2023, as available.
 - Data reported in the performance data tables reflect all assets that we operate, unless otherwise noted. Operational control is defined as the authority to introduce and implement operating policies at the facility. Data reflects 100 per cent for facilities where TC Energy, or one of its subsidiaries, has operational control regardless of percentage of financial ownership.
 - Full listings of the assets we operate are contained in the 2023 Annual Report; [page 39](#) for our natural gas assets, [page 58](#) for our liquids pipelines assets and [page 68](#) for our power and storage assets.
 - Financial data is reported in Canadian dollars. Foreign currencies are converted based on the average exchange rates published in our [2023 Annual Report](#) (1.35 U.S. to Canadian dollars, 16.91 U.S. dollar to Mexican pesos).
 - Footnotes provide additional information on 2023 data boundaries, definitions and methodology where applicable. Data exclusions or additions are noted throughout the report.
 - Totals may not add up due to rounding. In select instances, values have been reissued reflecting updated IS-based solution rounding rules and may differ slightly from values reported in previous years.
 - GHG emissions are reported both on an equity share and operational control approach, defined in alignment with the World Resources Institute and the World Business Council for Sustainable Development [GHG Protocol](#) in order to illustrate the difference in GHG emission footprint between the two organizational boundaries of reporting. The equity share reporting boundary best reflects TC Energy's corporate GHG emission footprint in relation to the percentage of ownership held across our operated and non-operated assets and more closely aligns with our financial performance results. The operational control boundary data represents the GHG emission footprint from assets that are operated by TC Energy and therefore are influenced under TC Energy's operational practices.
 - GHG emissions reported have been normalized to carbon dioxide equivalents (CO₂e) based on the [Intergovernmental Panel on Climate Change \(IPCC\) 100-year Global Warming Potentials \(GWPs\) in its Fourth Assessment Report](#).
- The indicators reported in our performance data tables reflect both external reporting frameworks and the interests of our stakeholders. Where we add indicators to align with new sustainability targets, for example, it may not be reasonable to calculate historical data points. Where historical data for a directly comparable scope is not available, this has been indicated as 'N/A'.

[Report on Sustainability performance data tables](#)



Governance characteristics

INDICATOR	UNIT	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
BOARD OF DIRECTORS							
Size of Board ¹	number	12	14	14	13	13	
Independent directors	per cent	92	86	93	92	92	GRI 2-9
Board diversity policy ²	yes/no	yes + a target of 30% women	yes + a target of 30% women	yes + a target of 30% women	yes + a target of 30% women	yes + a target of 30% women and at least one racially and/or ethnically diverse member ³	
Women on Board	per cent	25	29	33	38	38	GRI 2-9
Number of Board interlocks	number	1	1	0	0	0	
External Board service limits for independent directors	number	4 public company boards in total	4 public company boards in total	4 public company boards in total	4 public company boards in total	4 public company boards in total	
Average Director age	years	61	62	63	62	63	
All committees independent ⁴	yes/no	yes	yes	yes	yes	yes	
Annual Director elections	yes/no	yes	yes	yes	yes	yes	
Individual Director elections	yes/no	yes	yes	yes	yes	yes	
Majority voting policy	yes/no	yes	yes	yes	yes	yes	
Independent executive compensation consultant	yes/no	yes	yes	yes	yes	yes	
Clawback policy ⁵	yes/no	yes	yes	yes	yes	yes	
Double-trigger vesting on change of control	yes/no	yes	yes	yes	yes	yes	
Separate Chair and CEO	yes/no	yes	yes	yes	yes	yes	

¹ As of December 31, 2023. See [2024 Management Information Circular](#) and TC Energy's [website](#) for subsequent updates.

² Target achieved with 38.5 per cent women on the Board of Directors (5/13 members) and 15 per cent (2/13 members) racially and/or ethnically diverse members as of April 10, 2024. See our [Board Diversity Policy](#) for additional details.

³ Racially and/or ethnically diverse means Aboriginal peoples (persons who are Indigenous, Inuit or Métis) and members of visible minorities (means persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour).

⁴ Audit, Governance and HR committees are entirely independent and the HSSE committee must be a majority independent.

⁵ We maintain both an Incentive Compensation Recoupment and Holdback Policy, which is a requirement of NYSE listing standards, as well as a voluntary policy that provides for recoupment of incentive compensation from a broader category of executives in the event such executive engages in intentional misconduct.



Governance characteristics continued

INDICATOR	UNIT	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
Director retirement age	years	70	73	73	73	73 ⁶	
Director share ownership requirements	x retainer	4	4	4	4	4	
Executive share ownership requirements ⁷	x base salary	5x CEO 3x EVP 2x SVP 1x VP	5x CEO 3x EVP 2x SVP 1x VP	5x CEO 3x EVP 2x SVP 1x VP	5x CEO 3x EVP 2x SVP 1x VP	6x CEO 3x EVP 2x SVP 1x VP	GRI 2-9
CEO share ownership post-retirement hold period	years	1	1	1	1	1	
In-camera sessions at every Board and committee meeting	yes/no	yes	yes	yes	yes	yes	
Annual say on pay	yes/no	yes	yes	yes	yes	yes	
Code of business ethics	yes/no	yes	yes	yes	yes	yes	
Board, committee and director evaluations annually	yes/no	yes	yes	yes	yes	yes	
Board orientation and education program	yes/no	yes	yes	yes	yes	yes	

⁶ The earlier of a director turning 73 or attaining 15 years of service. Notwithstanding age limits, a director is eligible to serve a term of five years.

⁷ In 2023, the Human Resource Committee increased the CEO share ownership requirements from 5x to 6x multiple of base salary effective for 2024. Mr. Poirier has until the end of 2029 to meet the incremental share ownership requirements.



Operational overview

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
OPERATIONAL OVERVIEW							
NATURAL GAS PIPELINES							
Natural gas transmission network	kilometres	93,250	93,421	93,294	93,731	93,579	SASB EM-MD-000.A
Natural gas pipeline throughput - equity share	billion cubic feet	14,933	14,684	17,096	18,273	16,623¹	SASB EM-MD-000.A
Natural gas pipeline throughput - operational control	billion cubic feet	17,267	17,052	18,040	19,208	19,096	SASB EM-MD-000.A
LIQUIDS PIPELINES							
Liquids pipeline network	kilometres	4,900	4,946	4,856	4,856	4,865	SASB EM-MD-000.A
Liquids pipeline throughput - equity share	million barrels	433	409	392	366	440²	SASB EM-MD-000.A
Liquids pipeline throughput - operational control	million barrels	440	413	396	371	448²	SASB EM-MD-000.A
Liquids storage capacity	barrels	Over 6.5 million	Approximately 7 million	Approximately 7 million	Approximately 7 million	Approximately 7 million	
POWER							
Number of power facilities	number	7	7	7	7	10³	
Power generation capacity	megawatt	4,197	4,197	4,258	4,339	4,642	
Net power generation - equity share	megawatt hour	25,888,462	24,060,721	24,283,977	24,259,790	24,365,729	
Net power generation - operational control	megawatt hour	3,566,382	3,292,281	3,823,799	3,790,201	3,909,914	
STORAGE							
Natural gas storage capacity	billion cubic feet	653	653	653	650	650	
Natural gas volume injected and withdrawn - equity share	billion cubic feet	54	115	133	133	110⁴	
Natural gas volume injected and withdrawn - operational control	billion cubic feet	54	115	133	133	110⁴	

¹ The 2023 reduction in throughput, primarily reflects the [divestment of 40% TC Energy equity in the U.S. Columbia Gas and Columbia Gulf pipelines](#).

² The increase in liquids pipeline throughput reflects Port Neches coming into service and increased demand on the Keystone pipeline.

³ Includes projects placed in service and acquisitions.

⁴ The decrease in natural gas storage injected and withdrawn volumes reflects lower withdrawals from storage due to lower demand.



GHG emissions: Scope 1

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
ABSOLUTE SCOPE 1 GHG EMISSIONS^{1, 2}							
EQUITY SHARE APPROACH							
Total Scope 1 GHG emissions	thousand tonnes CO₂e	16,262	16,438	19,352	20,542	18,609	GRI 305-1 SASB EM-MD-110a.1 SASB IF-EU-110a.1
BREAKDOWN BY OPERATING SEGMENT							
Scope 1 GHG emissions: natural gas pipelines	thousand tonnes CO ₂ e	14,202	14,551	17,132	18,439	16,355³	
Scope 1 GHG emissions: Canadian natural gas pipelines	thousand tonnes CO ₂ e	6,979	6,437	7,267	8,587	8,102	
Scope 1 GHG emissions: U.S. natural gas pipelines	thousand tonnes CO ₂ e	7,145	8,018	9,785	9,741	8,125³	
Scope 1 GHG emissions: Mexico natural gas pipelines	thousand tonnes CO ₂ e	78	96	80	111	129⁴	
Scope 1 GHG emissions: liquids pipelines	thousand tonnes CO ₂ e	0	0	0	0	0	
Scope 1 GHG emissions: power and storage	thousand tonnes CO ₂ e	2,025	1,853	2,189	2,063	2,215	
Scope 1 GHG emissions: power	thousand tonnes CO ₂ e	2,005	1,840	2,177	2,051	2,203	
Scope 1 GHG emissions: storage	thousand tonnes CO ₂ e	20	13	13	12	11	
Scope 1 GHG emissions: corporate ⁵	thousand tonnes CO ₂ e	34	33	30	39	39	

¹ The quantification of GHG emissions follows the methodologies prescribed by various regulations in the different jurisdictions in which we operate. We report our emissions to British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec, Environment and Climate Change Canada (ECCC), the U.S. Environmental Protection Agency (EPA), California, Oregon, Maryland, Washington and Mexico's Ministry of Environment and Natural Resources. These methods can include, but are not limited to, direct measurement, use of emissions factors in conjunction with activity data and mass balance. We report greenhouse gases emitted to the atmosphere before accounting for offsets, credits, or other similar attributes that have reduced or compensated for emissions. In alignment with the World Research Institute GHG Protocol, Corporate Accounting and Reporting Standard, GHG emissions reported by TC Energy include those emissions from sources considered below regulatory reporting thresholds or from sources not required to be reported under regulatory methodologies.

² Approximately 80 per cent of our total Scope 1 emissions are associated with stationary combustion sources at our natural gas pipeline and co-generation power assets.

³ Variance in emissions from 2022 primarily reflect the [divestment of 40% TC Energy equity in the U.S. Columbia Gas and Columbia Gulf pipelines](#).

⁴ Increased volumes on the Mexico natural gas pipeline systems, and full year utilization of pipeline systems that came online in late 2022, resulted in increased emissions in 2023, as compared to 2022.

⁵ Scope 1 GHG emissions related to aviation, fleet vehicles and small equipment as well as offices and regional warehouses, are reported under the corporate operating segment. Starting in 2022, Scope 1 emissions from all material building spaces and subsidiaries are captured in this indicator.



GHG emissions: Scope 1 continued

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
BREAKDOWN BY SOURCE⁶							
Scope 1 GHG emissions: stationary combustion	thousand tonnes CO ₂ e	12,287	12,635	15,429	16,993	15,303³	
Scope 1 GHG emissions: venting	thousand tonnes CO ₂ e	1,785	1,530	1,709	1,407	1,272³	
Scope 1 GHG emissions: fugitive	thousand tonnes CO ₂ e	2,130	2,220	2,153	2,041	1,965	
Scope 1 GHG emissions: flaring	thousand tonnes CO ₂ e	22	16	27	70	34^{3,7}	
Scope 1 GHG emissions: transportation ⁸	thousand tonnes CO ₂ e	34	33	30	32	34	
ADDITIONAL							
Scope 1 (direct) methane emissions	thousand tonnes CO ₂ e	3,963	3,804	3,917	3,521	3,281	SASB EM-MD-110a.1
Portion of Scope 1 GHG emissions covered by reduction regulations ⁹	per cent	55	50	49	52	60³	SASB EM-MD-110a.1

³ Variance in emissions from 2022 primarily reflect the [divestment of 40% TC Energy equity in the U.S. Columbia Gas and Columbia Gulf pipelines](#).

⁶ GHG emissions by source category may not add up to the reported total Scope 1 GHG emissions as certain negligible emission sources have not been broken out to individual GHG constituents.

⁷ Flaring reductions in 2023 were attributed to lower planned maintenance activities on Canadian natural gas pipeline segments.

⁸ GHG emissions from transportation-related activities include corporately owned and operated aircraft as well as vehicle and small equipment operations.

⁹ This indicator represents the portion of total Scope 1 GHG emissions covered by reduction regulations based on provincial, state or federal GHG policies. The methodology used to determine this indicator is based on the inclusion of Scope 1 GHG emissions from all sources associated with natural gas pipelines and power and storage assets that are regulated under GHG reduction-based regulations in Canada and the U.S. Asset emissions covered under legislation such as the BC Carbon Tax or the Canadian federal Fuel Charge are not included in the emission reduction regulation coverage.



GHG emissions: Scope 1 continued

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
ABSOLUTE SCOPE 1 GHG EMISSIONS^{1, 2}							
OPERATIONAL CONTROL APPROACH							
Total Scope 1 GHG emissions	thousand tonnes CO₂e	18,284	18,172	19,888	21,132	20,902^{10 ^}	GRI 305-1 SASB EM-MD-110a.1 SASB IF-EU-110a.1
BREAKDOWN BY OPERATING SEGMENT							
Scope 1 GHG emissions: natural gas pipelines	thousand tonnes CO ₂ e	16,228	16,289	17,671	19,031	18,649	
Scope 1 GHG emissions: Canadian natural gas pipelines	thousand tonnes CO ₂ e	6,983	6,446	7,280	8,609	8,111	
Scope 1 GHG emissions: U.S. natural gas pipelines	thousand tonnes CO ₂ e	9,167	9,745	10,308	10,307	10,402	
Scope 1 GHG emissions: Mexico natural gas pipelines	thousand tonnes CO ₂ e	78	98	83	114	136⁴	
Scope 1 GHG emissions: liquids pipelines	thousand tonnes CO ₂ e	1	1	0	0	0	
Scope 1 GHG emissions: power and storage	thousand tonnes CO ₂ e	2,021	1,849	2,186	2,060	2,212	
Scope 1 GHG emissions: power	thousand tonnes CO ₂ e	2,002	1,837	2,173	2,048	2,201	
Scope 1 GHG emissions: storage	thousand tonnes CO ₂ e	20	13	13	12	11	
Scope 1 GHG emissions: corporate ⁵	thousand tonnes CO ₂ e	34	33	30	41	40	

¹ The quantification of GHG emissions follows the methodologies prescribed by various regulations in the different jurisdictions in which we operate. We report our emissions to British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec, Environment and Climate Change Canada (ECCC), the U.S. Environmental Protection Agency (EPA), California, Oregon, Maryland, Washington and Mexico's Ministry of Environment and Natural Resources. These methods can include, but are not limited to, direct measurement, use of emissions factors in conjunction with activity data and mass balance. We report greenhouse gases emitted to the atmosphere before accounting for offsets, credits, or other similar attributes that have reduced or compensated for emissions. In alignment with the World Research Institute GHG Protocol, Corporate Accounting and Reporting Standard, GHG emissions reported by TC Energy include those emissions from sources considered below regulatory reporting thresholds or from sources not required to be reported under regulatory methodologies.

² Approximately 80 per cent of our total Scope 1 emissions are associated with stationary combustion sources at our natural gas pipeline and co-generation power assets.

⁴ Increased volumes on the Mexico natural gas pipeline systems, and full year utilization of pipeline systems that came online in late 2022, resulted in increased emissions in 2023, as compared to 2022.

⁵ Scope 1 GHG emissions related to aviation, fleet vehicles and small equipment as well as offices and regional warehouses, are reported under the corporate operating segment. Starting in 2022, Scope 1 emissions from all material building spaces and subsidiaries are captured in this indicator.

¹⁰ TC Energy has obtained independent limited assurance of operational control boundary Scope 1 GHG emissions for the year ended December 31, 2023.



GHG emissions: Scope 1 continued

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
BREAKDOWN BY SOURCE⁶							
Scope 1 GHG emissions: stationary combustion	thousand tonnes CO ₂ e	14,117	14,190	15,935	17,541	17,338	
Scope 1 GHG emissions: venting	thousand tonnes CO ₂ e	1,952	1,678	1,745	1,439	1,436	
Scope 1 GHG emissions: fugitive	thousand tonnes CO ₂ e	2,158	2,254	2,151	2,050	2,047	
Scope 1 GHG emissions: flaring	thousand tonnes CO ₂ e	22	16	27	70	46⁷	
Scope 1 GHG emissions: transportation ⁸	thousand tonnes CO ₂ e	34	33	30	32	34	
ADDITIONAL							
Scope 1 (direct) methane emissions	thousand tonnes CO ₂ e	4,161	3,989	3,959	3,563	3,530	SASB EM-MD-110a.1
Portion of Scope 1 GHG emissions covered by reduction regulations ⁹	per cent	49	46	48	50	53	SASB EM-MD-110a.1

⁶ GHG emissions by source category may not add up to the reported total Scope 1 GHG emissions as certain negligible emission sources have not been broken out to individual GHG constituents.

⁷ Flaring reductions in 2023 were attributed to lower planned maintenance activities on Canadian natural gas pipeline segments.

⁸ GHG emissions from transportation-related activities include corporately owned and operated aircraft as well as vehicle and small equipment operations.

⁹ This indicator represents the portion of total Scope 1 GHG emissions covered by reduction regulations based on provincial, state or federal GHG policies. The methodology used to determine this indicator is based on the inclusion of Scope 1 GHG emissions from all sources associated with natural gas pipelines and power and storage assets that are regulated under GHG reduction-based regulations in Canada and the U.S. Asset emissions covered under legislation such as the BC Carbon Tax or the Canadian federal Fuel Charge are not included in the emission reduction regulation coverage.



GHG emissions: Scope 2

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
ABSOLUTE SCOPE 2 GHG EMISSIONS							
EQUITY SHARE APPROACH							
Total Scope 2 GHG emissions	thousand tonnes CO₂e	2,066	1,949	2,081	2,087	1,949¹	GRI 305-2
BREAKDOWN BY OPERATING SEGMENT							
Scope 2 GHG emissions: natural gas pipelines	thousand tonnes CO ₂ e	313	333	277	376	354	
Scope 2 GHG emissions: Canadian natural gas pipelines	thousand tonnes CO ₂ e	101	92	79	138	199²	
Scope 2 GHG emissions: U.S. natural gas pipelines	thousand tonnes CO ₂ e	210	238	196	236	153³	
Scope 2 GHG emissions: Mexico natural gas pipelines	thousand tonnes CO ₂ e	2	2	2	2	2	
Scope 2 GHG emissions: liquids pipelines	thousand tonnes CO ₂ e	1,660	1,485	1,659	1,566	1,466	
Scope 2 GHG emissions: power and storage	thousand tonnes CO ₂ e	94	131	145	140	125⁴	
Scope 2 GHG emissions: power	thousand tonnes CO ₂ e	72	87	104	93	80⁴	
Scope 2 GHG emissions: storage	thousand tonnes CO ₂ e	21	44	41	47	44	
Scope 2 GHG emissions: corporate ⁵	thousand tonnes CO ₂ e	N/A	N/A	N/A	4	5	

¹ In 2023, asset power consumption increased over four per cent year-over-year however, the corresponding Scope 2 GHG emissions across our Canada, U.S. and Mexico operations were marginally lower than 2022. As our Scope 2 GHG emissions are calculated using the location-based methodology, the lower Scope 2 GHG emissions in 2023 indicates a generalized improvement towards a lower-carbon intensive power grid, across most of our operational footprint.

² Increased 2023 Canadian natural gas pipeline Scope 2 GHG emissions is primarily attributed to increased power consumption at electrified compressor units that came online in late 2022.

³ Decreased 2023 U.S. natural gas pipeline Scope 2 GHG emissions is attributed to decreased power consumption, decreased power grid carbon intensity and the divestment of 40% TC Energy equity in the U.S. Columbia Gas and Columbia Gulf pipelines.

⁴ Less operational downtime in 2023 relative to 2022. Grid power is only imported to the facility during outages. Otherwise, power utilized on site is self-generated and is excluded from Scope 2 emissions as self-generated power is captured in the Scope 1 emissions.

⁵ In 2022, Scope 2 emissions from building spaces and subsidiaries under TC Energy's operational control were included in a new indicator representing the Corporate business segment. Operational data used to quantify Scope 2 GHG emissions from these sources was not available prior to 2022.



GHG emissions: Scope 2 continued

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
OPERATIONAL CONTROL APPROACH							
Total Scope 2 GHG emissions	thousand tonnes CO₂e	2,132	1,996	2,104	2,114	2,036^{1, 6 ^}	GRI 305-2
BREAKDOWN BY OPERATING SEGMENT							
Scope 2 GHG emissions: natural gas pipelines	thousand tonnes CO ₂ e	360	363	294	396	434	
Scope 2 GHG emissions: Canadian natural gas pipelines	thousand tonnes CO ₂ e	101	92	79	138	199²	
Scope 2 GHG emissions: U.S. natural gas pipelines	thousand tonnes CO ₂ e	257	269	213	256	233	
Scope 2 GHG emissions: Mexico natural gas pipelines	thousand tonnes CO ₂ e	2	2	2	2	2	
Scope 2 GHG emissions: liquids pipelines	thousand tonnes CO ₂ e	1,681	1,505	1,668	1,573	1,472	
Scope 2 GHG emissions: power and storage	thousand tonnes CO ₂ e	91	128	142	136	122⁴	
Scope 2 GHG emissions: power	thousand tonnes CO ₂ e	69	84	101	89	78⁴	
Scope 2 GHG emissions: storage	thousand tonnes CO ₂ e	21	44	41	47	44	
Scope 2 GHG emissions: corporate ⁵	thousand tonnes CO ₂ e	N/A	N/A	N/A	8	8	

¹ In 2023, asset power consumption increased over four per cent year-over-year however, the corresponding Scope 2 GHG emissions across our Canada, U.S. and Mexico operations were marginally lower than 2022. As our Scope 2 GHG emissions are calculated using the location-based methodology, the lower Scope 2 GHG emissions in 2023 indicates a generalized improvement towards a lower-carbon intensive power grid, across most of our operational footprint.

² Increased 2023 Canadian natural gas pipeline Scope 2 GHG emissions is primarily attributed to increased power consumption at electrified compressor units that came online in late 2022.

⁴ Less operational downtime in 2023 relative to 2022. Grid power is only imported to the facility during outages. Otherwise, power utilized on site is self-generated and is excluded from Scope 2 emissions as self-generated power is captured in the Scope 1 emissions.

⁵ In 2022, Scope 2 emissions from building spaces and subsidiaries under TC Energy's operational control were included in a new indicator representing the Corporate business segment. Operational data used to quantify Scope 2 GHG emissions from these sources was not available prior to 2022.

⁶ TC Energy has obtained independent limited assurance of operational control boundary Scope 2 GHG emissions for the year ended December 31, 2023.



GHG emissions: Scope 3

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
ABSOLUTE SCOPE 3 GHG EMISSIONS							
Total Scope 3 GHG emissions¹	thousand tonnes CO₂e	3,136	2,688	3,178	3,519	4,434²	GRI 305-3
BREAKDOWN BY SCOPE 3 CATEGORY							
Fuel- and energy-related activities (category 3) ³	thousand tonnes CO ₂ e	3,062	2,598	3,115	3,481	4,352²	
Waste generated in operations (category 5) ⁴	thousand tonnes CO ₂ e	50	75	49	23	61⁵	GRI 306-3
Business travel (category 6)	thousand tonnes CO ₂ e	12	5	4	6	7⁶	
Upstream leased assets (category 8) ⁷	thousand tonnes CO ₂ e	13	11	10	9	15⁶	

¹ Scope 3 GHG emissions cover 15 categories of which, we currently report on four relevant categories. Scope 3 emission categories reported are based on the operational control reporting boundary.

² The year-over-year increase to emissions in 2023, relative to 2022, are attributed to increased power consumption and adjusted emission factors for the 2023 operational year.

³ Emissions reported in Category 3 fuel- and energy-related activities include emissions related to the upstream activities attributed to fuel supplied for combustion during operational activities that are not included in our Scope 1 or Scope 2 GHG emissions. This category also includes emissions attributed to the transmission and distribution loss of electricity that is purchased and consumed by TC Energy's operational activities.

⁴ Scope 3 GHG emissions associated with waste are estimated using the spend-based method from the GHG Protocol Scope 3 Guidance and calculated emission factors in alignment with prior years. Spend data used to calculate waste related emissions, exclude capital project and construction related waste.

⁵ Waste-related expenditures increased in 2023 primarily due to the Keystone pipeline Milepost 14 incident.

⁶ The year-over-year increase to emissions in 2023, relative to 2022, are attributed to operational factors including changes in building space, energy utilization, and increased business related travel relative to 2022, when pandemic-related restrictions were still in place.

⁷ Category 8 emissions are attributed to the utility energy (i.e., fuel and electricity) consumed within TC Energy's leased building/office spaces. Utilities are administered and controlled by third party building services or building property owners. In leased building spaces where the utility energy remains under TC Energy's operational control, the associated emissions are allocated to the scope 1 and scope 2 GHG emission profiles.



GHG emissions: Scope 1 and 2 emissions intensities

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
ABSOLUTE SCOPE 1 AND 2 GHG EMISSIONS							
OPERATIONAL CONTROL APPROACH							
GHG emissions total	Scope 1+2 tonnes CO₂e	20,416	20,168	21,992	23,246	22,938	
SCOPE 1 AND 2 GHG EMISSIONS INTENSITIES							
EQUITY SHARE APPROACH¹							
GHG emissions intensity: Canada natural gas pipelines ²	Scope 1+2 tonnes CO ₂ e / throughput Bcf	891	874	909	994	968	
GHG emissions intensity: U.S. natural gas pipelines ²	Scope 1+2 tonnes CO ₂ e / throughput Bcf	1,117	1,229	1,176	1,119	1,135	
GHG emissions intensity: Mexico natural gas pipelines ²	Scope 1+2 tonnes CO ₂ e / throughput Bcf	197	198	155	195	173³	
GHG emissions intensity: Canada and U.S. liquids pipelines ⁴	Scope 1+2 tonnes CO ₂ e / receipt volume NSV bbls	0.0038	0.0036	0.0042	0.0043	0.0033⁵	
GHG emissions intensity: power ⁶	Scope 1 + 2 tonnes CO ₂ e / net generation MWh	0.0803	0.0801	0.0939	0.0884	0.0937	
GHG emissions intensity: storage	Scope 1 + 2 tonnes CO ₂ e / total volume injected + withdrawn Bcf	768	492	404	445	507⁷	

¹ Equity share GHG emission intensity calculations are based on Scope 1 and Scope 2 GHG emissions net to TC Energy, divided by the net production (generation or throughput) metrics. Net emissions and production are based on the total gross values multiplied by the per cent ownership of facilities by TC Energy as of Dec. 31, 2023, as published in the [2023 Annual Report](#).

² Calculated GHG emission intensities for natural gas business segments are based on a volume throughput denominator. Throughput volumes from the natural gas pipelines are based on nominated (scheduled) delivery volumes and/or measured (allocated) delivery volumes from each pipeline system.

³ Increased volumes on the Mexico natural gas pipeline systems, and full year utilization of pipeline systems that came online in late 2022, are the primary drivers of the improved emission intensity in 2023, as compared to 2022.

⁴ The GHG emission intensity indicator for the liquids pipelines business segment represents the net standard volume (NSV) receipt volumes on the pipeline systems and tank terminals across Canada and the U.S.

⁵ The decrease in liquids intensity in 2023, relative to 2022, reflects Port Neches coming into service and increased throughput on the Keystone pipeline.

⁶ Many of TC Energy's power generation assets generate both electricity and heat. The intensity calculations specific to the power business segment do not account for this heat generated in the denominator and therefore, represent only a conservative estimation of emissions intensity for power generation.

⁷ The increase in natural gas storage intensity in 2023, relative to 2022, is attributed to lower withdrawals from storage in 2023.



GHG emissions: Scope 1 and 2 emissions intensities continued

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
OPERATIONAL CONTROL APPROACH⁸							
GHG emissions intensity: total corporate⁹	Scope 1+2 kg CO₂e / GJ	0.96	0.96	1.00	1.01	0.98^{10 ^}	
GHG emissions intensity: Canada natural gas pipelines ²	Scope 1+2 tonnes CO ₂ e / throughput Bcf	879	863	899	983	954	
GHG emissions intensity: U.S. natural gas pipelines ²	Scope 1+2 tonnes CO ₂ e / throughput Bcf	1,073	1,129	1,144	1,100	1,121	
GHG emissions intensity: Mexico natural gas pipelines ²	Scope 1+2 tonnes CO ₂ e / throughput Bcf	185	166	128	164	153	
GHG emissions intensity: Canada and U.S. liquids pipelines ⁴	Scope 1 + 2 tonnes CO ₂ e / receipt volume NSV bbls	0.0038	0.0036	0.0042	0.0042	0.0033⁵	
GHG emissions intensity: power ⁶	Scope 1 + 2 tonnes CO ₂ e / net generation MWh	0.5807	0.5833	0.5947	0.5638	0.5827	
GHG emissions intensity: storage	Scope 1 + 2 tonnes CO ₂ e / total volume injected + withdrawn Bcf	768	492	404	445	507⁷	

² Calculated GHG emission intensities for natural gas business segments are based on a volume throughput denominator. Throughput volumes from the natural gas pipelines are based on nominated (scheduled) delivery volumes and/or measured (allocated) delivery volumes from each pipeline system.

⁴ The GHG emission intensity indicator for the liquids pipelines business segment represents the net standard volume (NSV) receipt volumes on the pipeline systems and tank terminals across Canada and the U.S.

⁵ The decrease in liquids intensity in 2023, relative to 2022, reflects Port Neches coming into service and increased throughput on the Keystone pipeline.

⁶ Many of TC Energy's power generation assets generate both electricity and heat. The intensity calculations specific to the power business segment do not account for this heat generated in the denominator and therefore, represent only a conservative estimation of emissions intensity for power generation.

⁷ The increase in natural gas storage intensity in 2023, relative to 2022, is attributed to lower withdrawals from storage in 2023.

⁸ Operational control GHG emission intensity calculations are based on gross Scope 1 and Scope 2 emissions from assets operated by TC Energy, divided by gross production (generation or throughput) metrics of those operated assets. Assets partially owned but not operated by TC Energy are excluded from the Scope 1, Scope 2 and production/throughput values that determine the emission intensity, under this reporting boundary.

⁹ TC Energy's corporate emissions intensity is based on an operational control reporting boundary. The production data from operational business segments are converted to a common unit of energy (GJ) to calculate this corporate intensity value. The production metrics from the Power and Energy Solutions co-generation facilities include the generation of heat exported to customers. Business segment emission intensities are not directly comparable to the corporate emissions intensity value without the conversion of production and throughput metrics to a common unit of measure, gigajoules (GJ).

¹⁰ TC Energy has obtained independent limited assurance of this indicator for the year ended December 31, 2023.



Air quality



INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
AIR QUALITY^{1, 2}							GRI 305-7 SASB EM-MD-120A.1 SASB IF-EU-120A.1
Nitrogen oxide (NO _x)	metric tonnes	45,099	40,421	40,054	41,131	35,555³	
Sulfur oxides (SO _x)	metric tonnes	74	98	165	144	207⁴	
Volatile organic compounds (VOCs)	metric tonnes	1,544	1,528	1,549	1,385	1,357	
Particulate matter 10 micrometers (PM ₁₀)	metric tonnes	675	686	718	694	694	

¹ Air quality emissions data is calculated based on the regulatory requirements in jurisdictions where we operate. The data reported within includes emissions at, or above, regulatory reporting thresholds.

² Air quality emissions data reflects all operated assets, including our U.S. and Mexico operations.

³ The year-over-year difference is attributed to several factors including decreased fuel consumption, infrastructure upgrades and application of unit-specific emissions factors, as available.

⁴ The year-over-year difference is attributed increased operating time at the MacKay Cogeneration facility in 2023, as compared to 2022.



Ecological impacts

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
BIODIVERSITY							
Total land owned, leased and/or operated ¹	acres	N/A	378,888	380,286	381,779	381,553	
Acreage of land (owned, leased and/or operated) within areas of protected conservation status or endangered species habitat ²	acres	N/A	47,713	56,543	46,758 ³	46,803⁴	GRI 304-3 SASB EM-MD-160a.2
Percentage land owned, leased, and/or operated within areas of protected conservation status or endangered species habitat ²	per cent	N/A	13	15	12 ³	12⁴	SASB EM-MD-160a.2
LAND CAPABILITY							
Cumulative total of disturbed land ⁵	acres	N/A	4,503	11,512	21,460	13,378⁶	SASB EM-MD-160a.2
Land restoration completed ⁷	acres	N/A	2,449	8,303	18,419	10,201⁶	SASB EM-MD-160a.3
Percentage of disturbed area restored within five years ⁸	per cent	N/A	100	99	98	99⁹	SASB EM-MD-160a.3

- ¹ Our biodiversity indicator currently reflects most of the land TC Energy owns, leases and/or operates that is associated with our pipeline rights-of-way, compressor stations, meter stations, pump stations and power plants in Canada, Mexico and the U.S. This footprint also includes abandoned assets. The footprint does not include temporary workspaces or proposed projects. Valve sites are assumed to be contained within the right-of-way footprint.
- ² TC Energy considers land to be an area of protected conservation status or endangered species habitat if it is identified as such in one or more of the publicly available datasets we use. While not an exact match, in 2023 we selected multiple publicly available datasets that included conservation status and habitat information that most closely aligned to the intent of SASB indicator EM-MD-160a.2. We continue to identify critical habitat for endangered species.
- ³ This value has been restated to align with current calculation methodology, as described in the 2023 value footnote.
- ⁴ In prior years, we included area near protected areas in this value. Our 2023 data better reflects the SASB standards by including areas within and near critical habitat and within protected areas. For consistency, the 2022 data has been restated to reflect the same methodology.
- ⁵ The cumulative total of disturbed land currently includes land disturbed by gas and liquids pipeline and maintenance projects across Canada, the U.S. and Mexico that underwent post-construction monitoring in the reporting year to determine restoration success. The cumulative total of disturbed lands includes land disturbed from projects constructed in preceding years that have not yet achieved restoration and are being monitored annually for restoration status. We do not include operating facilities that are above ground (fenced and graveled sites) in our disturbed lands or restoration reporting until they undergo decommissioning and abandonment. Projects are typically monitored annually following final clean-up after construction is completed, for five years, until restoration has been achieved.
- ⁶ Due to ongoing unforeseen circumstances, access to monitor restoration success in 2023 was limited to one project's right-of-way in Mexico. We continue to work with the appropriate agencies in Mexico to validate we meet our restoration commitments. While reforestation of these projects has not yet begun, the right-of-way is stable and regrowth is occurring naturally. We intend to reforest beyond the right-of-way and anticipate commencing monitoring activities in 2024. We remain committed to maintaining compliance and restoring these lands to their equivalent land capability.
- ⁷ Restoration is defined as the process of returning disturbed land to equivalent land capability, which is the ability of the land to support various land uses similar to the ability that existed prior to disturbance. This includes ensuring stable, non-hazardous, non-erodible soil conditions and seeding or enabling the re-establishment of vegetation, as appropriate and in accordance with applicable regulatory requirements and permit conditions.
- ⁸ While the cumulative total of land disturbed and restored in acres reflects projects monitored in the reporting year, the percentage of land restored has been defined using a five-year timeframe to better reflect the longer-term nature of our restoration activities. Although much of the land is restored by the fifth year following construction, localized issues may arise that do not achieve restoration success within that five-year timeframe. We are committed to monitoring these issues until they are resolved. This means our data may reflect restoration activities beyond the fifth year.
- ⁹ In 2023, we restored 99% of disturbed lands. The remaining one per cent was not achieved due to additional repair work required in localized sites due to lack of access, challenging terrain and weather conditions. Some projects where repairs were completed in the preceding growing season warrant additional monitoring beyond the five-year period to verify success of the mitigation. These sites will be restored when conditions permit, and we will continue active engagement with landowners until restoration is achieved.



Ecological impacts continued

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
WATER							SASB IF-EU-140A.1
Water withdrawal: fresh surface water	million cubic metres	N/A	2.96	2.05	1.75	1.94	GRI 303-3
Water withdrawal: fresh groundwater	million cubic metres	N/A	0.00	0.00	0.00	0.00	GRI 303-3
Water withdrawal: municipal/utility	million cubic metres	N/A	0.38	0.27	0.43	0.37	GRI 303-3
Water discharge	million cubic metres	N/A	0.14	0.16	0.20	0.74¹⁰	GRI 303-4
Water consumption ¹¹	million cubic metres	5.10	3.20	2.16	1.97	1.57	GRI 303-5
WASTE							
Hazardous waste generated ¹²	metric tonnes	N/A	10,129	13,157	5,711	3,602	GRI 306-3
Waste; recycled/reused ¹³	metric tonnes	N/A	N/A	N/A	N/A	89,426	GRI 306-4

¹⁰ In 2023, we improved our water discharge reporting to include water discharged or dispersed over land in or near the same watershed from which it was withdrawn according to permitted requirements and applicable water quality standards.

¹¹ Water consumption volume reflects management's best estimate. TC Energy considers water consumed unless it is either discharged directly to the same source at equal or higher quality or dispersed over land in or near the same watershed from which it was withdrawn according to permitted requirements and applicable water quality standards. The volume reported includes water used for power asset operations (excluding once-through cooling water) and some water used during hydrostatic testing of pipelines and liquids storage tanks that could not be discharged. Water used during construction or operational activities (e.g. for dust control on access roads, construction of winter access or to assist in hydrovac operations) is excluded. In 2023, we improved our water discharge reporting and had a decrease in water consumption for pipeline hydrotests from the previous year.

¹² We have chosen to focus reporting on the generation of hazardous wastes for 2020 onward. Most of TC Energy's hazardous wastes consist of recyclable hydrocarbons from our storage operations, recovered from the natural gas in our gas pipelines or used lube oils and glycols from turbines, pumps and engines. Any hazardous wastes that cannot be recovered or recycled are disposed of at licensed, secure disposal facilities. 2023 data includes operations, project and remediation waste for TC Energy operated assets across Canada, the U.S. and Mexico. Requirements for tracking and reporting of waste as well as the waste classifications and types themselves vary by jurisdiction. TC Energy also relies on multiple third-party vendors and/or government databases for tracking of hazardous waste. Internal subject matter experts familiar with our waste streams review and reconcile waste data often using assumptions and/or estimations to consolidate the data into a single, corporate-wide value.

¹³ Reuse and recycling are vital to our waste management. While our practices encompass reuse and recycling of waste when possible across all our operations, 2023 only includes waste recycled or reused from our Canada Gas operations.



Asset integrity and process safety

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
PIPELINE INSPECTION							
Percentage of natural gas pipelines inspected ¹	per cent	20	24	26	32	26	SASB EM-MD-540a.2
Percentage of liquids pipelines inspected ^{1,2}	per cent	125	202	58	34	84	SASB EM-MD-540a.2
Number of in-line inspections ¹	number	313	323	288	335	362	
Length of in-line inspections ¹	kilometres	24,890	30,895	23,019	31,927	28,520	
Completed integrity digs	number	846	865	841	957	978	
INVESTMENT IN INTEGRITY PROGRAMS							
Investment in pipeline integrity programs ³	dollars (billions)	1.5	2.1	1.5	1.6	2.1	

¹ The pipeline integrity inspection program may vary year-to-year based on several factors, including performing inspections based on annual system-wide risk assessments of our pipeline system as well as performing prescribed regulatory inspections. The regulatory inspection intervals vary depending on jurisdiction.

² Values over 100 per cent indicate that some pipeline sections were inspected multiple times using different technologies. The pipeline integrity inspection program will vary to some degree from year-to-year based on several factors, which include performing inspections based on our annual system-wide risk assessments of our pipeline system as well as performing the prescribed regulatory inspections. The intervals for regulatory inspections vary depending on the regulatory jurisdiction.

³ Pipeline integrity spending related to the natural gas and liquids pipelines we operate will fluctuate based on the results of on-going risk assessments conducted on our pipeline systems and evaluations of information obtained from recent inspections, incidents and maintenance activities. This data set between 2019 and 2023 inclusive has been restated for consistency with current calculation methodology which includes expenditures related to our U.S. Natural Gas Pipelines Modernization Program.



Asset integrity and process safety incidents

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
PROCESS SAFETY INCIDENTS							SASB EM-MD-540A.1
Significant process safety incidents ¹	number	4	0	0	1	1 ²	
Tier 1 process safety incidents ³	number	N/A	14	5	17	17	
Tier 2 process safety incidents ⁴	number	N/A	22	11	14	15	
REPORTABLE GAS RELEASES⁵							
Number of reportable gas releases	number	49 ⁶	69	59	58	44	
Volume of reportable gas releases	cubic metres	6,383,452	16,771,363	4,674,919	10,055,790	5,259,447	
HYDROCARBON SPILLS⁷							SASB EM-MD-160A.4
Number of hydrocarbon spills	number	4	9	2	3	2	
Volume of hydrocarbon spills ⁸	barrels	4,847	750	5	12,939	12	
Volume of hydrocarbon spills: in unusually sensitive areas ⁹	barrels	0	0	0	0	0	
Volume of hydrocarbon recovered ¹⁰	barrels	4,847	690	5	2	12,949 ¹¹	
THIRD-PARTY INCIDENTS							
One Calls per 1,000 km of right-of-way ¹²	number	5,820	4,790	4,865	4,926	4,912	
Unauthorized pipeline encroachments per 1,000 km of right-of-way ¹³	number	4.61	3.97	3.32	3.85	3.93	
Unauthorized excavations per 1,000 km of right-of-way ¹⁴	number	1.86	1.56	1.33	1.36	1.18	

¹ Significant process safety incidents are defined by TC Energy as unplanned or uncontrolled spills or releases that result in major consequences to people or the environment. They are a subset of Tier 1 process safety incidents. In evaluating the severity of the incident, we also consider the potential risk of legal, financial or reputational impacts to our company.

² On July 25, there was a [rupture on our Columbia Gas Transmission Pipeline](#). Pursuant to our incident protocols, an emergency shutdown and response was initiated. The affected segment was isolated and there were no injuries to our workers or the public.

³ Tier 1 process safety incidents are unplanned or uncontrolled releases that result in either greater consequences and/or higher release volumes. These incidents may result in a serious injury to a person, an officially declared community evacuation or shelter in place order, a fire or an explosion. Our reporting of Tier 1 incidents is guided by CSA Z260, an industry wide standard.

⁴ Tier 2 process safety incidents are unplanned or uncontrolled releases with lesser consequences. These incidents may result in a recordable injury to a person, a fire or explosion that can be contained and extinguished with little to no damage, or localized environmental damage. Our reporting of Tier 2 incidents is guided by CSA Z260, an industry wide standard.

⁵ A reportable release is defined as one that is reportable to an external agency or authority, such as a federal, provincial or state regulator. Thresholds for reporting of gas releases vary depending on the jurisdiction and therefore releases are not wholly comparable by jurisdiction or year-over-year.

⁶ This value has been restated. Upon validation of this data set, one previously reported incident was found to have been re-classified as non-reportable.

⁷ Hydrocarbon spills are defined as an unintentional release of liquid hydrocarbons, in excess of one barrel, to the environment and that is reportable to an authority. Releases from the company's operating assets (e.g., pipeline, storage tank, process facility) are included in this disclosure while releases from construction equipment and vehicles are excluded.

⁸ Hydrocarbon spill volume represents the total estimated amount spilled that reached the environment and is not reduced by the amount of such hydrocarbon subsequently recovered, evaporated or otherwise lost.

⁹ An unusually sensitive area (USA) in this metric means a drinking water or ecological resource area that is unusually sensitive to environmental damage from a hazardous liquid pipeline release.

¹⁰ The volume of spill recovered represents the spilled hydrocarbons removed from the environment through short-term spill response activities, excluding amounts recovered during longer term remediation at spill sites and amounts that evaporated, burned or were dispersed.

¹¹ All 12,937 barrels of material released from the [Keystone Milepost 14 incident](#) were recovered as of June 2023, and, in October 2023, we completed creek restoration work. We will maintain a presence at site to progress long-term reclamation activities and environmental monitoring, supporting our commitment to full reclamation of the land. Additionally, all materials from the two separate events in the reporting year have been recovered.

¹² Local One Call centres field requests, received via telephone or online, to have all underground utilities located and marked free of charge, prior to any commercial or residential project involving digging.

¹³ TC Energy defines unauthorized encroachments as those that include activities carried out without authorization from local One Call centres.

¹⁴ TC Energy defines unauthorized excavations as those that include more serious activities than other encroachments, with greater potential to cause impact or exposure that would result in a need to repair an underground facility.



Emergency preparedness and response

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
EMERGENCY PREPAREDNESS AND RESPONSE EXERCISES							
Total exercises completed	number	192	171	211	196	213	
Annual field exercises ¹	number	28	12	19	18	16²	
Tabletop exercises ³	number	146	151	159	149	188²	
Equipment deployment exercises ⁴	number	8	0	10	9	4²	
Additional exercises	number	10	8	23	20	5²	
EMERGENCY PREPAREDNESS AND RESPONSE TRAINING							GRI 404-1
First responder training ⁵	number	747	1,429	1,999	2,001	2,061	
Incident Command System training ⁶	number	4,797	4,321	4,107	3,657	2,769⁷	

¹ A field (functional) exercise is a single or multi-organization activity designed to evaluate capabilities and multiple functions using a simulated response scenario. A field exercise is designed to evaluate the management of emergency operations centres, command posts, response and support teams and to assess the ability to implement respective plans, processes, and procedures.

² Post Emergency Management Program Review, business units developed training requirements, based on their risks which resulted in a change in the number of exercises conducted.

³ Tabletop exercises use an informal meeting format where internal staff with emergency response responsibilities work through an actual or potential emergency scenario. The area or team assembles to review any applicable emergency response procedures and test any communication equipment that would be used during emergency response (e.g. satellite phones, notification systems).

⁴ Equipment deployment exercises demonstrate ability to deploy spill response equipment identified in the Emergency Response Plan. They may consist entirely of operator owned equipment, or a combination of OSRO (Oil Spill Response Organization) and operator equipment.

⁵ Personnel that could be the first on the scene of an emergency event are profiled to complete the First Responder Training course. This is a specialized training course on how to assess, respond and activate the emergency management system in an emergency event as the first company representative on site.

⁶ The Incident Command System (ICS) is a standardized on-site management system designed to enable effective and efficient emergency response. This system is used across North America and is the standard response system within multiple industries and public safety response organizations.

⁷ The year-over-year difference is attributed to offset employee training cycles and varying training assignments.



A thriving economy



INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED							GRI 201-1
Direct economic value generated	dollars (millions)	13,255	12,999	13,387	14,977	15,934	
Economic value distributed: operating costs	dollars (millions)	2,262	2,213	2,467	4,769	4,969	
Economic value distributed: employee wages and benefits	dollars (millions)	1,651	1,665	1,631	1,687	1,619	
Economic value distributed: payments to providers of capital	dollars (millions)	4,439	5,643	5,779	5,877 ¹	6,223	
Economic value distributed: payments to government	dollars (millions)	1,437	1,205	1,282	1,395	1,914	
Economic value distributed: payments to governments in Canada	dollars (millions)	466	555	438	441	480	
Economic value distributed: payments to governments in U.S.	dollars (millions)	1,217	625	758	722	1,397²	
Economic value distributed: payments to governments in Mexico	dollars (millions)	45	25	86	232 ³	37	
Economic value distributed: community investments	dollars (millions)	30	29	24	25	30⁴	
Economic value retained	dollars (millions)	5,087 ¹	3,908 ¹	3,836 ¹	3,037 ¹	2,798	
TECHNOLOGY AND INNOVATION SPEND							
R&D program spend	dollars (millions)	N/A	7	10	11	13⁵	
Capital and operating optimization and revenue opportunities achieved ⁶	dollars (millions)	13	23	47	5 ⁷	7⁸	
Engineering R&D value creation	dollars (millions)	N/A	N/A	N/A	229	141⁹	

¹ This value has been reissued to correct an error made in prior year data collection processes.

² On October 4, 2023, TC Energy completed the sale of a 40 per cent non-controlling equity interest in Columbia Gas Transmission, LLC and Columbia Gulf Transmission, LLC to Global Infrastructure Partners for proceeds of \$5.3 billion (US\$3.9 billion) increasing our 2023 U.S. taxes paid.

³ 2022 includes certain income tax adjustments reflecting select point-in-time intercompany transactions.

⁴ As a result of the 2023 dissolution of the TC Energy Foundation, the year-over-year variance is attributed increased spend from funds previously-held. Community Action Teams were also introduced in Mexico, increasing investment amounts in the country.

⁵ Our In-line Inspection Technology Program Budget increased to address top priority research including small and large diameter crack technology development projects.

⁶ The capital and operating optimization indicator includes cost avoidance, savings and incremental revenue gains realized within the reporting period for our RAMP program in Canada. Our Canadian Natural Gas Pipelines business unit has an optimization initiative called RAMP that leverages data and algorithms to identify compression equipment operational issues and fix them before they cause an equipment failure. The cost avoidance dollars are from avoiding spend on equipment failure repairs by fixing issues before they cause a failure.

⁷ The capital and operating optimization indicator includes cost avoidance, savings and incremental revenue gains realized within the reporting period for two specific programs. Our Canadian Natural Gas Pipelines business unit has an optimization initiative that leverages data and algorithms to identify operational issues and optimize maintenance, balancing cost, reliability, integrity and commercial needs. Another initiative driving a systematic approach to improve efficiencies across our U.S. Natural Gas Pipelines business unit ended in 2021, although process and work improvements identified from this initiative, continue. Additionally, similar initiatives may be made in the future and would be reported accordingly.

⁸ The RAMP program grew significantly in 2023 with more staff and equipment coverage. This led to an increase in cost avoidance realized in 2023.

⁹ Our R&D program tracks the value of implemented research annually. In 2023, value creation for select projects was estimated based on historical data.



A thriving economy continued

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
POLITICAL CONTRIBUTIONS							GRI 415-1
Political contributions made by TC Energy Corporation in Canada ¹⁰	dollars	6,000	5,000	0	14,250	8,495	
Political contributions made by TC Energy U.S. subsidiaries ¹¹	U.S. dollars	0	0	194,544	433,750	262,450¹²	
Political contributions made by TC PAC, a separate segregated fund in the U.S. ¹³	U.S. dollars	207,900	302,930	240,650	398,225	266,275¹⁴	
COMPETITIVE BEHAVIOUR							
Total monetary losses that relate to violations of regulations governing competitive behaviours ¹⁵	dollars	641,000	0	0	0	0	SASB EM-MD-520a.1
SIGNIFICANT ENVIRONMENTAL FINES							
Number of significant environmental fines ¹⁶	number	0	2	2	3	4¹⁷	
Value of significant environmental fines	dollars	0	253,429	916,421	317,958	957,137	

¹⁰ Political contributions by corporations are not permitted in most Canadian jurisdictions. Corporate political contributions are permissible in Saskatchewan. TC Energy participated in political events in Saskatchewan in 2023.

¹¹ Political contributions in the U.S. were made by U.S. subsidiaries of TC Energy or the TC PAC. The historical contribution values have been reissued to reflect U.S. dollars.

¹² The year-over-year variance for political contributions made by U.S. subsidiaries of TC Energy is attributed to select contributions intended for 2023 not being paid in that calendar year. Variance from 2018 through 2020 reflects a shift away from U.S. subsidiary contributions in favor of making political contributions through the TC PAC. This was due in part to leaders requesting a uniform contribution policy across the various state jurisdictions in which TC Energy operates.

¹³ The TransCanada USA Services Inc. Political Action Committee (TC PAC) is a separate segregated fund (SSF) established under U.S. federal election law by TransCanada USA Services Inc., a U.S. subsidiary of TC Energy. The TC PAC is funded solely through contributions from U.S. employees. In many cases, amounts such as receipts, disbursements and cash on hand differ from what we report internally to what is found on FEC. This is because the FEC also records disbursements that include bank fees, registration fees, and voided checks from the prior year. The PAC is directed entirely out of the United States, by U.S. residents.

¹⁴ The year-over-year variance is attributed to 2022 being a state and federal election year with increased contributions whereas 2023 was not a state and federal election year.

¹⁵ The total amount of monetary losses incurred during the reporting period because of legal proceedings associated with alleged breaches of regulations governing competitive behaviour.

¹⁶ A significant environmental fine is a fine or penalty of >\$5,000 that is paid to a regulatory agency within the reporting year. In some cases, the year the fine was paid may differ from the year the fine was issued.

¹⁷ The company was issued four fines from environmental regulatory agencies in Canada and Mexico with Mexico-based fines converted per the exchange rate as of December 31, 2023, in the 2023 Annual Report.



Supplier diversity

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
SUPPLIER DIVERSITY¹							
TIER 1 DIVERSE SPEND²	DOLLARS (MILLIONS)	N/A	301	530	1,312	1,511	
Canadian diverse spend: Tier 1 ³	dollars (millions)	N/A	201	409	1,185	1,347 ⁴	
Canadian Indigenous spend: Tier 1	dollars (millions)	70	189	398	1,174	1,341 ⁵	
U.S. diverse spend: Tier 1 ⁶	dollars (millions)	N/A	100	121	127	164 ⁷	
U.S. Native American spend: Tier 1	dollars (millions)	5	6	4	6	8 ⁸	
Year-over-year change in diverse influenceable procurement spend ⁹	per cent	N/A	N/A	N/A	132	4 ¹⁰	GRI 204-1
TIER 2 DIVERSE SPEND¹¹	DOLLARS (MILLIONS)	N/A	705	907	718	480	
Canadian diverse spend: Tier 2 ³	dollars (millions)	N/A	566	840	714	479 ¹²	
Canadian Indigenous spend: Tier 2	dollars (millions)	380	503	701	705	466 ¹²	
U.S. diverse spend: Tier 2 ⁶	dollars (millions)	N/A	99	66	4	1 ¹³	
U.S. Native American spend: Tier 2	dollars (millions)	2	27	4	0	0 ¹⁴	

¹ We continue to explore opportunities to expand our supplier diversity program to Mexico.

² Tier 1 spend represents a classification of expenditure data that TC Energy spends directly with prime suppliers and/or general contractors and is directly linked to contractual agreement(s) or purchases.

³ Our diverse spend in Canada includes spend with suppliers who self-identify as Indigenous, visible minorities, women, LGBTQ+ and/or veterans.

⁴ TC Energy's expanded efforts to increase direct spend with diverse suppliers, leverage our buying power to influence our Tier 1 vendors and work with external supplier diversity partners to identify future participation opportunities.

⁵ Our continued concentration on an inclusive Indigenous business approach is demonstrated through increased spend as compared to prior years.

⁶ Our diverse spend in the U.S. includes spend with suppliers who self-identify as Native American, Asian-American, Hispanic-American, African-American, women and/or veterans.

⁷ Leveraging our Industry association partners resulted in identification of diverse suppliers in our current supply chain which accounted for the year-over-year increase.

⁸ Continued advancement of our inclusive procurement strategy has allowed us to realize an increase as compared to prior years.

⁹ Influenceable procurement spend is defined as purchase order procurement spend and release order procurement spend of Tier 1 suppliers.

¹⁰ While we did not meet our goal to increase diverse influenceable procurement spend by 5% year-over-year, we did see an overall increase of our Tier 1 influenceable spend in both Canada and the US. The 4% increase in diverse spend reflects TC Energy's enterprise-wide commitment to supplier diversity and long-term dedication to promoting economic inclusion across our value chain.

¹¹ Tier 2 spend represents expenditures that TC Energy's prime suppliers and/or general contractors spend for services and/or products that directly support TC Energy's business needs. Indirect expenditures may consist of labour, subcontractors, materials and/or expense spend.

¹² The completion of key projects has resulted in an overall decrease in Tier 2 diverse subcontractor spend as compared to prior years.

¹³ Tier 2 spend in the US has not been managed with the same rigor as it has been in Canada. As a result, we cannot draw any conclusions based on the completeness of the data at this time. A priority for 2024 is establishing a sustainable process for tracking Tier 2 diverse spend.

¹⁴ Efforts in this region were concentrated in Tier 1 diverse supplier spend. Our priority in 2024 will be further development of, and enhancement to, the Tier 2 US reporting methodology and processes.



Thriving communities



INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
COMMUNITY INVESTMENT							
Direct community investment	dollars (millions)	30	29	24	25	30 ¹	GRI 201-1
Indirect community investment ²	dollars (millions)	2	3	3	3	4 ³	
Total community investment	dollars (millions)	32	32	27	28	34	
Community investment directed towards the environment ⁴	dollars (millions)	N/A	1	2	3	4	
External resources leveraged ⁵	dollars (millions)	2	3	2	2	3 ⁶	
Total value of investment in the community ⁷	dollars (millions)	34	35	28	30	37 ⁸	
EMPLOYEE GIVING & VOLUNTEERING							
Workforce donations ⁹	dollars (millions)	1	2	1	1	1	
Total corporate donations through the workforce giving program ¹⁰	dollars (millions)	2	4	3	3	3 ¹¹	
Total volunteer hours logged by employees and contractors	hours	36,583	22,567	24,186	32,037	38,491 ¹²	
Volunteer hours logged during paid time	hours	7,324	1,413	1,714	4,249	4,868 ¹²	
Volunteer hours logged during unpaid time	hours	29,258	21,154	22,471	27,788	33,623 ¹²	
Overall participation in workforce giving program	per cent	N/A	84	55	61	60	
LOCAL COMMUNITY ENGAGEMENT PLANS							
Percentage of operations with local community engagement, impact assessments and development programs	per cent	100	100	100	100	100	GRI 413-1

¹ As a result of the 2023 dissolution of the TC Energy Foundation, the year-over-year variance is attributed increased spend from funds previously-held. Community Action Teams were also introduced in Mexico, increasing investment amounts in the country.

² This includes in-kind giving, the value of volunteer hours during paid work time and program management costs.

³ The increased activity of our community investment and employee giving and volunteering programs in Mexico resulted in an increase of program management costs.

⁴ TC Energy is focusing on increasing its environmental spend across Canada, the U.S. and Mexico and on building partnerships that have a positive environmental impact on species and habitats at risk.

⁵ External resources leveraged include community contributions from outside sources that can be directly linked to our involvement such as employee donations and time volunteered during non-working hours or funds matched from governments or other partners.

⁶ The increase in external resources leveraged is attributed to the increased data submissions from partner organizations this year as compared to the previous year.

⁷ The total value of TC Energy's investments in the community includes cash investments, in-kind giving, volunteering during paid working hours, program management costs and community contributions from outside sources that can be directly linked to our involvement.

⁸ This year-over-year increase is attributed to increased TC Energy Foundation spend and increased activity of our community investment and employee giving and volunteering programs in Mexico.

⁹ Funds donated to causes through the employee participation program are dependent on personal donations from our employee base and naturally fluctuate year-over-year based on various internal and external factors.

¹⁰ Total corporate donations through our employee giving program includes company matching donations, employee participation campaigns, donation credits from TC Energy and corporate donations from Empower directly to causes.

¹¹ The year-over-year increase in corporate donations can be attributed to the company's decision to double the rewards offered for volunteering. Initially set at \$8, the rewards were raised to \$15 for each hour of volunteer work logged by employees. The expiration date for these rewards was shortened as well, encouraging employees to utilize them before the year's end. Additionally, the annual limit on the rewards an employee could receive was increased.

¹² The rise in participation as compared to previous years can be attributed to increased employee volunteer rewards and successful employee participation campaigns with increased workforce engagement and incentivized volunteering during and outside work hours.



Workforce demographics

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
WORKFORCE DEMOGRAPHICS							
CORE WORKFORCE							
Total	number	7,387	7,358	7,083	7,350	7,385	GRI 2-7
Canada	number	3,728	3,677	3,587	3,694	3,569	GRI 2-7
U.S.	number	3,344	3,355	2,993	3,111	3,137	GRI 2-7
Mexico	number	315	326	503	545	679	GRI 2-7
Employees represented by independent trade union or covered by collective bargaining agreements	per cent	5	5	4	5	4	GRI 2-30
LEADERSHIP¹							
Total	number	910	936	944	1,049	1,058	
Executive leadership team	number	10	9	9	9	9	
CONTRACTOR WORKFORCE							GRI 2-8
Total	number	3,211	3,515	3,466	3,545	2,641	
Canada	number	2,037	2,223	2,409	2,619	1,878	
U.S.	number	901	1,081	1,057	926	763	
Mexico	number	273	211	0	0	0	
NEW HIRES (CORE WORKFORCE)							GRI 401-1
Total	number	886	663	884	973	927	
Canada	number	417	364	336	430	351	
U.S.	number	387	257	326	416	320	
Mexico	number	82	42	222	127	256	
Women	per cent	29	32	32	30	32	

¹ Our leadership includes core workforce employees classified as leaders and above.



Workforce demographics continued

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
CORE WORKFORCE TURNOVER							GRI 401-1
OVERALL TURNOVER RATE	PER CENT	8	10	16	9	9	
Canada	per cent	7	11	11	8	10	
U.S.	per cent	9	8	22	9	8	
Mexico	per cent	15	9	10	16	13	
Women	per cent	8	9	14	13	11	
Men	per cent	8	10	16	8	9	
Voluntary turnover rate ²	per cent	5	4	11	7	6	
Involuntary turnover rate ³	per cent	3	6	4	2	3	
TRAINING AND DEVELOPMENT							
Full Time Employee (FTE) Training and Development; average time	hours	N/A	N/A	N/A	39	34 ⁴	
Full Time Employee (FTE) Training and Development; average spend	dollars	N/A	N/A	N/A	4,671	4,104 ⁵	

² Voluntary turnover includes employees who retired or resigned from employment at TC Energy.

³ Involuntary turnover includes divestitures, severances, discharges and layoffs.

⁴ The 'right training at the right time for the right role' was a 2023 focus. We consolidated training which led to a reduction in time spent in training without compromising the intent and objectives. Average hours also fluctuates based on individuals place in the re-train cycle for courses.

⁵ Average training and development spend per FTE is directly correlated to average training and development hours per FTE; as time decreased, costs decreased.



Workforce diversity

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
INCLUSION AND DIVERSITY¹							GRI 405-1
GENDER							
Women: core workforce	per cent	28	29	30	29	29	
Women: leadership	per cent	28	30	32	30	31	
Women: leadership positions in our corporate locations ²	per cent	34	34	36	35	36 ³	
VISIBLE MINORITIES IN LEADERSHIP							
Visible minorities in leadership positions across our Canadian and U.S. workforce	per cent	13	13	14	17	17	
PROTECTED GROUPS BY JURISDICTION							GRI 405-1
CANADIAN CORE WORKFORCE							
Women	per cent	37	38	38	37	37	
Indigenous ⁴	per cent	2	3	3	3	3	
Persons with disabilities	per cent	3	3	3	3	2	
Visible minorities ⁴	per cent	21	23	24	24	24	
U.S. CORE WORKFORCE							
Women	per cent	19	19	19	18	18	
Minorities ⁵	per cent	13	14	14	15	15	
Individuals with disabilities	per cent	3	3	2	2	1	
Veterans	per cent	6	6	5	5	5	
MEXICAN CORE WORKFORCE							
Women	per cent	27	28	31	30	29	
INCLUSION AND DIVERSITY TRAINING							GRI 404-1
Leaders and employees trained on how to recognize and mitigate unconscious bias and how to create and sustain an inclusive workplace	per cent	N/A	58	99	100	97	

¹ Diversity data is categorized by protected groups as defined by regional compliance requirements: in Canada under the Employment Equity Act and in the U.S. as a condition of the Office of Federal Contract Compliance Programs. There are no such compliance requirements in Mexico, however, we track and voluntarily report Mexico gender workforce representation.

² Leadership positions in our corporate locations of Calgary, Houston, Charleston and Mexico City.

³ TC Energy has obtained independent limited assurance of this indicator for the year ended December 31, 2023.

⁴ In Canada, Indigenous groups are reported separately from visible minorities.

⁵ In the U.S., American Indians and Alaska Natives are included in minorities reporting.



Occupational safety, health and industrial hygiene

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
CORE WORKFORCE							GRI 403-9
Employee fatalities	number	0	1	1	0	4 ¹	SASB IF-EU-320a.1
Employee recordable case rate ²	recordable cases per 200,000 hours worked	0.42	0.49	0.38	0.78 ³	0.38 ⁴	GRI 403-10 SASB IF-EU-320a.1
Employee away-from-work case rate ⁵	away from work cases per 200,000 hours worked	0.10	0.07	0.13	0.26 ³	0.18 ⁶	GRI 403-10
Employee vehicle incident frequency ⁷	vehicle incidents per 1,000,000 km driven	1.90	1.53	1.54	1.54 ³	1.70 ⁸	
CONTRACTOR WORKFORCE							GRI 403-9
Contractor fatalities	number	0	0	0	1	0	SASB IF-EU-320a.1
Contractor recordable case rate ²	recordable cases per 200,000 hours worked	1.13	0.65	0.83	0.85 ³	0.66 ⁴	GRI 403-10 SASB IF-EU-320a.1
Contractor away-from-work case rate ⁵	away from work cases per 200,000 hours worked	0.11	0.09	0.10	0.09 ³	0.09	GRI 403-10
Contractor vehicle incident frequency ⁷	vehicle incidents per 1,000,000 km driven	1.78	1.38	1.09	1.56 ³	1.05 ⁸	

¹ In 2023, we experienced a tragic incident involving a helicopter flight in Mexico, where four employee lives were fatally lost. TC Energy offered special support to the families of our colleagues and other impacted colleagues through our Employee and Family Assistance Program.

² Consistent with industry best practice, TC Energy defines total recordable case rate as the number of recordable cases related to a common exposure base of 200,000 hours (100 full-time employees). Recordable cases are all work-related deaths and illnesses and those work-related injuries that result in a loss of consciousness, restriction of work or motion, transfer to another job or require medical treatment beyond first aid.

³ This value has been restated to account for updates made following incident investigations that concluded after the reporting year's data collection process.

⁴ The year-over-year variance is attributed to the number of incidents reported.

⁵ TC Energy defines away-from-work case rate as an incident resulting in an injury or illness that prevents an employee from returning to work on the next scheduled shift. The number of away-from-work cases, where the employee would have worked but could not because of an occupational injury or illness, is related to a common exposure base of 200,000 hours (100 full-time workers).

⁶ The year-over-year variance is attributed to the number of away-from-work incidents reported.

⁷ TC Energy defines vehicle incident frequency rate as the number of recordable vehicle incidents related to a common exposure base of 1,000,000 km driven. A recordable vehicle incident is any incident (regardless of fault) involving a fleet, rental motor vehicle, or a personal vehicle being used for TC Energy business which results in an injury to any person or damage to any vehicle or property, unless the vehicle was safely and properly parked at the time of the incident.

⁸ The year-over-year variance is attributed to the number of vehicle incidents reported.



Occupational safety, health and industrial hygiene continued

INDICATOR	UNITS	2019	2020	2021	2022	2023	RELATED FRAMEWORK INDICATOR ID
COMBINED (EMPLOYEE AND CONTRACTOR) WORKFORCE							
Combined (employee and contractor) recordable case rate ²	recordable cases per 200,000 hours worked	0.89	0.60	0.69	0.86 ³	0.58^{4,9}	GRI 403-9 GRI 403-10 SASB IF-EU-320a.1
EMPLOYEE ABSENCES							
Casual absence rate ¹⁰	average number of days absent per employee per year	1.81	1.40	0.99	1.03	1.66¹¹	
Short-term disability absence rate ¹²	average number of days absent per employee per year	2.27	2.20	2.66	2.23	1.47¹³	
Workers compensation absence rate ¹⁴	average number of days absent per employee per year	0.05	0.03	0.03	0.03	0.05¹⁵	
Total employee absence rate ¹⁶	average number of days absent per employee per year	4.13	3.63	3.68	3.29	3.19	
MENTAL HEALTH AWARENESS TRAINING							
Employees completed the Mental Health and Psychological Safety training	per cent	N/A	N/A	3	8	99	

² Consistent with industry best practice, TC Energy defines total recordable case rate as the number of recordable cases related to a common exposure base of 200,000 hours (100 full-time employees). Recordable cases are all work-related deaths and illnesses and those work-related injuries that result in a loss of consciousness, restriction of work or motion, transfer to another job or require medical treatment beyond first aid.

³ This value has been restated to account for updates made following incident investigations that concluded after the reporting year's data collection process.

⁴ The year-over-year variance is attributed to the number of incidents reported.

⁹ For the purposes of internal reporting and tracking, TC Energy utilizes a quantification methodology that differs from that for external compliance and regulatory reporting. TC Energy's 2023 internally-quantified combined employee and contractor recordable case rate was 0.50.

¹⁰ TC Energy defines casual absence as when an employee is unfit for work for up to five consecutive work shifts due to a non-work related illness or injury.

¹¹ When comparing 2023 to 2022 absence data, we note an increase in the casual absence rate as well as a decrease in short term disability (STD) rate. This may be partially attributed to the change in methodology for categorizing union casual absence as compared to STD rate. Additionally, employees may be taking a more proactive approach to their health before it becomes a more serious issue that leads to STD.

¹² TC Energy defines STD as a medical absence lasting longer than five consecutive shifts away from work due to a non-occupational illness or injury.

¹³ We have observed a reduction in the utilization of STD in 2023. This may be partially attributed to an internal methodology change in which STD with modifications are no longer included. Overall, we are experiencing fewer STD cases and a decreased average duration of each case, due to employees successfully returning to work on modified or full duty.

¹⁴ TC Energy defines workers' compensation (WC) absences as a work-related illness or injury requiring medical aid and/or medical absence of more than a day, involving a provincial or state company-sponsored income replacement program operated through the various provincial or state workers' compensation boards or U.S. insurance carriers.

¹⁵ Even though we had less, the Workers' compensation cases in 2023 were longer in duration than cases in previous years.

¹⁶ TC Energy defines the average number of days absent per employee as the sum of the casual absence rate, STD absence rate and WC absence rate.



CONTENT INDICES

Global Reporting Initiative alignment

The concordance table below demonstrates the relationship between TC Energy’s sustainability reporting and the Global Reporting Initiative (GRI).

Applicable GRI Sector Standard: GRI 11: Oil and Gas Sector 2021

DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
GRI 2: GENERAL DISCLOSURES 2021			
2-1	Organizational details	TCEnergy.com; Contact 2023 Annual Report 2023 Annual Information Form 2023 CDP Climate Change Questionnaire; C0 Introduction	
2-2	Entities included in the organization’s sustainability reporting	In this report > Reporting boundaries , Performance data 2023 CDP Climate Change Questionnaire; C0 Introduction	
2-3	Reporting period, frequency and contact point	Publication date: July 2024, annual frequency In this report > Invitation for feedback , Performance data 2023 CDP Climate Change Questionnaire; C0 Introduction	
2-4	Restatements of information	Included in footnotes In this report > Performance data 2023 CDP Climate Change Questionnaire; C5 Emissions methodology	
2-5	External assurance	In this report > Assurance TCEnergy.com; Limited assurance report 2023 CDP Climate Change Questionnaire; C10 Verification	
2-6	Activities, value chain and other business relationships	In this report > About this report 2023 Annual Report; About our business 2023 CDP Climate Change Questionnaire; C0 Introduction, C12 Engagement	
2-7	Employees	In this report > Workforce demographics	
2-8	Workers who are not employees	In this report > Workforce demographics	



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
2-9	Governance structure and composition	In this report > Corporate and sustainability governance , Governance characteristics 2024 Management Information Circular; Governance 2023 CDP Climate Change Questionnaire; C1 Governance	
2-10	Nomination and selection of the highest governance body	2024 Management Information Circular; Governance	
2-11	Chair of the highest governance body	2024 Management Information Circular; Governance	
2-12	Role of the highest governance body in overseeing the management of impacts	2024 Management Information Circular; Governance 2023 CDP Climate Change Questionnaire; C1 Governance	
2-13	Delegation of responsibility for managing impacts	2024 Management Information Circular; Governance 2023 CDP Climate Change Questionnaire; C1 Governance	
2-14	Role of the highest governance body in sustainability reporting	In this report > Message from the CEO & Board Chair , Q&A with the CSO	
2-15	Conflicts of interest	2024 Management Information Circular; Conflicts of interest and related party transactions	
2-16	Communication of critical concerns	2024 Management Information Circular; Other information	
2-17	Collective knowledge of the highest governance body	2024 Management Information Circular; Orientation and education, Board oversight of ESG initiatives 2023 CDP Climate Change Questionnaire; C1 Governance	
2-18	Evaluation of the performance of the highest governance body	2024 Management Information Circular; Orientation and education, Board effectiveness and director assessment 2023 CDP Climate Change Questionnaire; C1 Governance	
2-19	Remuneration policies	2024 Management Information Circular; Compensation	
2-20	Process to determine remuneration	2024 Management Information Circular; Compensation	
2-22	Statement on sustainable development strategy	In this report > Strategy	
2-23	Policy commitments	2024 Management Information Circular; Governance philosophy Code of Business Ethics (COBE) Policy	
2-24	Embedding policy commitments	In this report > Strategy Embedding the United Nations Global Compact principles into TC Energy's strategy	



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
2-25	Processes to remediate negative impacts	In this report > Forward-looking information 2023 Annual Report 2023 CDP Climate Change Questionnaire; C2 Risks and opportunities, C3 Business strategy	
2-26	Mechanisms for seeking advice and raising concerns	In this report > Business ethics and compliance 2024 Management Information Circular; Governance philosophy Embedding the United Nations Global Compact principles into TC Energy's strategy	
2-27	Compliance with laws and regulations	In this report > Business ethics and compliance 2024 Management Information Circular; Strategic planning, Non-GAAP Measures Code of Business Ethics (COBE) Policy Contractor Code of Business Ethics (COBE) Policy Embedding the United Nations Global Compact principles into TC Energy's strategy	
2-28	Membership associations	2023 CDP Climate Change Questionnaire; C12 Engagement Oversight and policies on lobbying, political contributions and corporate memberships Report on Climate-related Lobbying	11.2.4
2-29	Approach to stakeholder engagement	In this report > Strategy 2024 Management Information Circular; Engagement 2023 CDP Climate Change Questionnaire; C12 Engagement	
2-30	Collective bargaining agreements	In this report > Workforce demographics	
GRI 3: MATERIAL TOPICS 2021			
3-1	Process to determine material topics	In this report > Strategy 2022 sustainability materiality assessment	
3-2	List of material topics	In this report > Strategy 2022 sustainability materiality assessment	
200	ECONOMIC TOPICS		
201	ECONOMIC PERFORMANCE 2016		
3-3	Management of material topics	In this report > Strategy , Enterprise risk management 2023 Annual Report; Guarantees, Climate change and related regulation, Foreign currency transactions and translation, Risk management and financial instruments.	11.2.1, 11.14.1, 11.21.1
201-1	Direct economic value generated and distributed	In this report > A thriving economy , Thriving communities	11.14.2, 11.21.2



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
201-2	Financial implications and other risks and opportunities due to climate change	In this report > Climate change and the energy transition , TCFD comprehensive alignment > Climate-related risks and opportunities 2023 Annual Report; About TC Energy, Other information 2024 Management Information Circular; Health, safety, sustainability and environment committee 2023 Annual Information Form; Power and energy solutions 2023 CDP Climate Change Questionnaire; C2 Risks and opportunities	11.2.2
201-3	Defined benefit plan obligations and other retirement plans	2023 Annual Report; Stock options and other compensation programs, Employee post-retirement benefits	
201-4	Financial assistance received from government	2023 Annual Report	11.21.3
202	MARKET PRESENCE 2016		
3-3	Management of material topics	In this report > Workforce , External relationships , Indigenous engagement and reconciliation	11.11.1, 11.14.1
202-2	Proportion of senior management hired from the local community	Supplier Diversity and Local Participation Business Policy Supplier Diversity and Indigenous Reporting Requirements (Canada) Supplier Diversity and Local Participation Requirements – United States	11.11.2, 11.14.3
203	INDIRECT ECONOMIC IMPACTS 2016		
3-3	Management of material topics	In this report > Community investment priorities	11.14.1
203-1	Infrastructure investments and services supported	2023 Annual Report	11.14.4
203-2	Significant indirect economic impacts	2023 Annual Report	11.14.5
204	PROCUREMENT PRACTICES 2016		
3-3	Management of material topics	In this report > Indigenous engagement and reconciliation , Responsible procurement Embedding the United Nations Global Compact principles into TC Energy's strategy	11.14.1
204-1	Proportion of spending on local suppliers	In this report > Supplier diversity Supplier Diversity and Local Participation Business Policy	11.14.6
205	ANTI-CORRUPTION 2016		
3-3	Management of material topics	In this report > Business ethics and compliance , Enterprise risk management 2024 Management Information Circular; Risk oversight and enterprise risk management Code of Business Ethics (COBE) Policy Contractor Code of Business Ethics (COBE) Policy Embedding the United Nations Global Compact principles into TC Energy's strategy	11.20.1



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
205-1	Operations assessed for risks related to corruption	Avoiding Bribery and Corruption Policy Embedding the United Nations Global Compact principles into TC Energy's strategy	11.20.2
205-2	Communication and training about anti-corruption policies and procedures	Avoiding Bribery and Corruption Policy	11.20.3
206	ANTI-COMPETITIVE BEHAVIOUR 2016		
3-3	Management of material topics	In this report > Business ethics and compliance , Enterprise risk management Code of Business Ethics (COBE) Policy Contractor Code of Business Ethics (COBE) Policy	11.19.1
207	TAX 2019		
3-3	Management of material topics	In this report > Accountability and decision-making , Business ethics and compliance	11.21.1
207-1	Approach to tax	TCEnergy.com; Tax information	11.21.4
207-2	Tax governance, control, and risk management	TCEnergy.com; Tax information	11.21.5
207-3	Stakeholder engagement and management of concerns related to tax	TCEnergy.com; Tax information	11.21.6
207-4	Country-by-country reporting	TCEnergy.com; Tax information	11.21.7
300	ENVIRONMENTAL TOPICS		
302	ENERGY 2016		
3-3	Management of material topics	In this report > Climate change and the energy transition Embedding the United Nations Global Compact principles into TC Energy's strategy	11.1.1
302-1	Energy consumption within the organization	GHG Emissions Reduction Plan 2023 CDP Climate Change Questionnaire; C8 Energy	11.1.2
302-2	Energy consumption outside of the organization	GHG Emissions Reduction Plan	11.1.3
302-3	Energy intensity	GHG Emissions Reduction Plan 2023 CDP Climate Change Questionnaire; C6 Emissions data, C7 Emissions breakdown	11.1.4
302-4	Reduction of energy consumption	2023 CDP Climate Change Questionnaire; C8 Energy	
302-5	Reductions in energy requirements of products and services	2023 CDP Climate Change Questionnaire; C4 Targets and performance	



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
303	WATER AND EFFLUENTS 2018		
3-3	Management of material topics	In this report > Environmental management , Water Embedding the United Nations Global Compact principles into TC Energy's strategy	11.6.1
303-1	Interactions with water as a shared resource	In this report > Water TCEnergy.com; Protecting water	11.6.2
303-2	Management of water discharge-related impacts	In this report > Water TCEnergy.com; Protecting water	11.6.3
303-3	Water withdrawal	In this report > Ecological impacts , Water TCEnergy.com; Protecting water	11.6.4
303-4	Water discharge	In this report > Ecological impacts , Water TCEnergy.com; Protecting water	11.6.5
303-5	Water consumption	In this report > Ecological impacts , Water TCEnergy.com; Protecting water	11.6.6
304	BIODIVERSITY 2016		
3-3	Management of material topics	In this report > Environmental management , Ecological impacts , Environmentally-focused community giving Embedding the United Nations Global Compact principles into TC Energy's strategy	11.4.1, 11.16.1
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	In this report > Land restoration TCEnergy.com; Land and wildlife	11.4.2
304-2	Significant impacts of activities, products and services on biodiversity	In this report > Land restoration TCEnergy.com; Land and wildlife Safeguarding biodiversity Our approach Reducing our environmental footprint - Fact sheet	11.4.3
304-3	Habitats protected or restored	In this report > Land restoration TCEnergy.com; Land and wildlife 2023 CDP Climate Change Questionnaire; C15 Biodiversity, C15.6	11.4.4
305	EMISSIONS 2016		
3-3	Management of material topics	In this report > Climate change and the energy transition	11.1.1, 11.2.1, 11.3.1



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
305-1	Direct (Scope 1) GHG emissions	In this report > Greenhouse gas emissions , GHG emissions: Scope 1 (equity share , operational control) 2023 CDP Climate Change Questionnaire; C6 Emissions data, C7 Emissions breakdown	11.1.5
305-2	Energy indirect (Scope 2) GHG emissions	In this report > Greenhouse gas emissions , GHG emissions: Scope 2 2023 CDP Climate Change Questionnaire; C6 Emissions data, C7 Emissions breakdown	11.1.6
305-3	Other indirect (Scope 3) GHG emissions	In this report > Greenhouse gas emissions , GHG emissions: Scope 3 2023 CDP Climate Change Questionnaire; C6 Emissions data, C7 Emissions breakdown	11.1.7
305-4	GHG emissions intensity	In this report > GHG emissions: Scope 1 and 2 emissions intensities 2023 CDP Climate Change Questionnaire; C6 Emissions data, C7 Emissions breakdown	11.1.8
305-5	Reduction of GHG emissions	In this report > Greenhouse gas emissions , TCFD comprehensive alignment > metrics and targets GHG Emissions Reduction Plan 2023 Annual Report; Our strategy, Risk management and enterprise risk management 2024 Management Information Circular; Summary, Sustainability and environmental, social and governance matters 2023 CDP Climate Change Questionnaire; C4 Targets and performance, C6 Emissions data, C7 Emissions breakdown	11.2.3
305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	In this report > Air quality	11.3.2
306	WASTE 2020		
3-3	Management of material topics	In this report > Operational management , Environmental management , Waste	11.5.1, 11.8.1
306-1	Waste generation and significant waste-related impacts	In this report > Waste	11.5.2
306-3	Waste generated	In this report > Ecological impacts , Waste , GHG emissions: Scope 3	11.5.4, 11.8.2
306-4	Waste diverted from disposal	In this report > Ecological impacts , Waste	11.5.5
308	SUPPLIER ENVIRONMENT ASSESSMENT 2016		
3-3	Management of material topics	In this report > Supply chain governance	
400	SOCIAL TOPICS		
401	EMPLOYMENT 2016		
3-3	Management of material topics	In this report > Workforce , Indigenous engagement and reconciliation	11.7.1, 11.10.1



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
401-1	New employee hires and employee turnover	In this report > Employee attraction, retention, development and engagement , Workforce demographics	11.10.2
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	2023 Annual Report ; Stock options and other compensation programs , Employee post-retirement benefits	11.10.3
402	LABOUR/MANAGEMENT RELATIONS 2016		
3-3	Management of material topics	In this report > Workforce , Indigenous engagement and reconciliation Embedding the United Nations Global Compact principles into TC Energy's strategy	11.7.1, 11.10.1
402-1	Minimum notice periods regarding operational changes	Equal Employment Opportunity and Non-Discrimination Policy	11.7.2, 11.10.5
403	OCCUPATIONAL HEALTH AND SAFETY 2018		
3-3	Management of material topics	In this report > Employee and contractor safety Embedding the United Nations Global Compact principles into TC Energy's strategy	11.9.1
403-1	Occupational health and safety management system	In this report > Operational management system 2024 Management Information Circular ; Committee responsibilities 2023 Annual Report ; Health, safety, sustainability and environment	11.9.2
403-2	Hazard identification, risk assessment, and incident investigation	In this report > Operational management system TCEnergy.com; Safety 2024 Management Information Circular ; Committee responsibilities 2023 Annual Report ; Environmental risk, compliance and liabilities , Climate change and related regulation	11.9.3
403-3	Occupational health services	2024 Management Information Circular ; Committee responsibilities	11.9.4
403-4	Worker participation, consultation, and communication on occupational health and safety	In this report > Operational management system TCEnergy.com; Safety 2024 Management Information Circular ; Committee responsibilities 2023 Annual Report ; Health, safety and asset integrity	11.9.5
403-5	Worker training on occupational health and safety	In this report > Operational management: Emergency preparedness and response	11.9.6
403-6	Promotion of worker health	In this report > Mental health and psychological safety Embedding the United Nations Global Compact principles into TC Energy's strategy	11.9.7



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	In this report > Operational management system TCEnergy.com; Safety 2024 Management Information Circular; Committee responsibilities 2023 Annual Report; Health, safety and asset integrity	11.9.8
403-8	Workers covered by an occupational health and safety management system	In this report > Operational management: Emergency preparedness and response , Operational management system	11.9.9
403-9	Work-related injuries	In this report > Occupational safety, health and industrial hygiene	11.9.10
403-10	Work-related ill health	In this report > Occupational safety, health and industrial hygiene	11.9.11
404	TRAINING AND EDUCATION 2016		
3-3	Management of material topics	In this report > Workforce	11.10.1, 11.11.1
404-1	Average hours of training per year per employee	In this report > Operational management: Emergency preparedness and response , Emergency preparedness and response , Workforce diversity	11.10.6, 11.11.4
405	DIVERSITY AND EQUAL OPPORTUNITY 2016		
3-3	Management of material topics	In this report > Employee attraction, retention, development and engagement , Board diversity Embedding the United Nations Global Compact principles into TC Energy's strategy	11.11.1
405-1	Diversity of governance bodies and employees	In this report > Board diversity , Governance characteristics , Workforce diversity Board Diversity Policy	11.11.5
406	NON-DISCRIMINATION 2016		
3-3	Management of material topics	In this report > Employee attraction, retention, development and engagement , Business ethics and compliance Code of Business Ethics (COBE) Policy Contractor Code of Business Ethics (COBE) Policy Equal Employment Opportunity and Non-Discrimination Policy Embedding the United Nations Global Compact principles into TC Energy's strategy	11.11.1
406-1	Incidents of discrimination and corrective actions taken	TC Energy Diversity, Equity and Inclusion Action Plan TC Energy Accessibility Plan	11.11.7
407	FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING 2016		
3-3	Management of material topics	Equal Employment Opportunity and Non-Discrimination Policy	11.13.1
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Equal Employment Opportunity and Non-Discrimination Policy	11.13.2



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
409	FORCED OR COMPULSORY LABOUR 2016		
3-3	Management of material topics	In this report > Corporate and sustainability governance , Responsible procurement Forced Labour and Child Labour Report 2023 Code of Business Ethics (COBE) Policy Contractor Code of Business Ethics (COBE) Policy Embedding the United Nations Global Compact principles into TC Energy's strategy	11.12.1
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	Forced Labour and Child Labour Report 2023 Embedding the United Nations Global Compact principles into TC Energy's strategy	11.12.2
410	SECURITY PRACTICES 2016		
3-3	Management of material topics	In this report > Human rights Code of Business Ethics (COBE) Policy Contractor Code of Business Ethics (COBE) Policy	11.18.1
411	RIGHTS OF INDIGENOUS PEOPLES 2016		
3-3	Management of material topics	In this report > Indigenous engagement and reconciliation 2024 Management Information Circular ; Management diversity Code of Business Ethics (COBE) Policy Contractor Code of Business Ethics (COBE) Policy Indigenous Relations Policy	11.16.1, 11.17.1
413	LOCAL COMMUNITIES 2016		
3-3	Management of material topics	In this report > External relationships , Indigenous engagement and reconciliation	11.15.1
413-1	Operations with local community engagement, impact assessments, and development programs	In this report > Community investment priorities , Thriving communities 2023 Annual Report ; Understanding our Canadian natural gas pipelines segment	11.15.2
413-2	Operations with significant actual and potential negative impacts on local communities	In this report > External relationships	11.15.3
414	SUPPLIER SOCIAL ASSESSMENT 2016		
3-3	Management of material topics	In this report > Supply chain governance	11.10.1, 11.12.1
415	PUBLIC POLICY 2016		
3-3	Management of material topics	In this report > Political engagement	11.2.4, 11.22.1



DISCLOSURE	DESCRIPTION	TC ENERGY REFERENCE MATERIAL	GRI SECTOR STANDARD REFERENCE NUMBER
415-1	Political contribution	In this report > A thriving economy Political Contributions and Activities Policy	11.22.2
416	CUSTOMER HEALTH AND SAFETY 2016		
3-3	Management of material topics	In this report > Climate change and the energy transition	11.3.1
418	CUSTOMER PRIVACY 2016		
3-3	Management of material topics	In this report > Privacy and information security Cybersecurity Policy Protection of Personal Information Policy	



Sustainability Accounting Standards Board alignment

The concordance table below demonstrates the relationship between TC Energy's sustainability reporting and the Sustainability Accounting Standards Board (SASB) Oil & Gas - Midstream industry standard (October 2018) and SASB Electric utilities & power generators standard (October 2018). For a limited number of metrics, non-standard measures are required and we have disclosed similar indicators in alignment with internal standards.

TOPIC AND ACCOUNTING METRIC	INDICATOR ID	SELECT TC ENERGY MATERIAL
OIL & GAS – MIDSTREAM		
GREENHOUSE GAS EMISSIONS		
Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations	EM-MD-110a.1	In this report > GHG emissions: Scope 1 (equity share , operational control) 2023 CDP Climate Change Questionnaire ; C5 Emissions methodology, C6 Emissions data, C7 Emissions breakdown
Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	EM-MD-110a.2	In this report > Climate change and the energy transition , TCFD & IFRS S2 climate-related disclosures comprehensive alignment > TCFD and IFRS S2 climate-related financial disclosures on strategy GHG Emissions Reduction Plan 2023 CDP Climate Change Questionnaire ; C4 Targets and performance
AIR QUALITY		
Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) particulate matter (PM ₁₀)	EM-MD-120a.1	In this report > Air quality
ECOLOGICAL IMPACTS		
Description of environmental management policies and practices for active operations	EM-MD-160a.1	In this report > Advancing sustainability and innovation , Operational management , TCFD comprehensive alignment & IFRS S2 climate-related disclosures comprehensive alignment > TC Energy's Operational Management System TCEnergy.com ; Commitment Statement , Environment principles 2023 Annual Report ; Environmental risk, compliance and liabilities
Percentage of land owned, leased, and/or operated within areas of protected conservation status or endangered species habitat	EM-MD-160a.2	In this report > Ecological impacts
Terrestrial acreage disturbed, percentage of impacted area restored	EM-MD-160a.3	In this report > Ecological impacts
Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume in Unusually Sensitive Areas (USAs), and volume recovered	EM-MD-160a.4	In this report > Asset integrity and process safety incidents
COMPETITIVE BEHAVIOUR		



TOPIC AND ACCOUNTING METRIC	INDICATOR ID	SELECT TC ENERGY MATERIAL
Total amount of monetary losses as a result of legal proceedings associated with federal pipeline and storage regulations	EM-MD-520a.1	In this report > A thriving economy <i>Note: TC Energy interprets this indicator as representing the total amount of monetary losses incurred during the reporting period as a result of legal proceedings associated with alleged breaches of regulations governing competitive behaviour.</i>
OPERATIONAL SAFETY, EMERGENCY PREPAREDNESS & RESPONSE		
Number of reportable pipeline incidents, percentage significant	EM-MD-540a.1	In this report > Asset integrity and process safety incidents <i>Note: this indicator requests information on pipeline incidents only. To transparently communicate integrity incidents related to our diverse asset base, including our power and storage facilities, we have chosen to publicly report on Tier 1 and Tier 2 process safety incidents guided by industry standard CSA Z260. TC Energy believes this approach is congruent with the intent of SASB EM-MD-540a.1 to promote increased, comparable reporting of integrity incidents.</i>
Percentage of (1) natural gas and (2) hazardous liquid pipelines inspected	EM-MD-540a.2	In this report > Asset integrity and process safety
Number of (1) accident releases and (2) non-accident releases (NARs) from rail transportation	EM-MD-540a.3	Not applicable to TC Energy's operations
Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout project lifecycles	EM-MD-540a.4	In this report > Operational management , Employee and contractor safety , Mental health and psychological safety TCEnergy.com; Commitment Statement
ACTIVITY METRIC		
Total metric ton-kilometres of: (1) natural gas, (2) crude oil, and (3) refined petroleum products transported, by mode of transport	EM-MD-000.A	In this report > Operational overview <i>Note: TC Energy does not report activity in these units.</i>
ELECTRIC UTILITIES & POWER GENERATORS		
GREENHOUSE GAS EMISSIONS & ENERGY RESOURCE PLANNING		
(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations and (3) emissions-reporting regulations	IF-EU-110a.1	In this report > GHG emissions: Scope 1 (equity share , operational control) 2023 CDP Climate Change Questionnaire ; C6 Emissions data, C7 Emissions breakdown
Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	IF-EU-110a.3	In this report > Climate change and the energy transition, TCFD & IFRS S2 climate-related disclosures comprehensive alignment > TCFD and IFRS S2 climate-related financial disclosures on strategy GHG Emissions Reduction Plan 2023 CDP Climate Change Questionnaire ; C4 Targets and performance



TOPIC AND ACCOUNTING METRIC	INDICATOR ID	SELECT TC ENERGY MATERIAL
AIR QUALITY		
Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) particulate matter (PM ₁₀), (4) lead (Pb), and (5) mercury (Hg); percentage of each in or near areas of dense population	IF-EU-120a.1	In this report > Air quality
WATER MANAGEMENT		
(1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress	IF-EU-140a.1	In this report > Ecological impacts , Water TCEnergy.com; Protecting water
WORKFORCE HEALTH & SAFETY		
(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	IF-EU-320a.1	In this report > Occupational safety, health and industrial hygiene

TCFD and IFRS S2 Climate-related Disclosures comprehensive alignment

TC Energy recognizes the [Task Force on Climate-Related Financial Disclosures](#) (TCFD) recommendations, as well as the [International Sustainability Standards Board's \(ISSB\) International Financial Reporting Standards \(IFRS\) S2 Climate-related Financial Disclosures standard](#) (IFRS S2), as useful frameworks for assessing and reporting on climate-related risks and opportunities¹. Our sustainability publications describe how we assess climate-related risks and opportunities and embed climate considerations in our governance practices, strategy and risk management. Our publications also include metrics used to manage those risks with associated targets.

TC ENERGY'S APPROACH TO TO TCFD AND IFRS S2

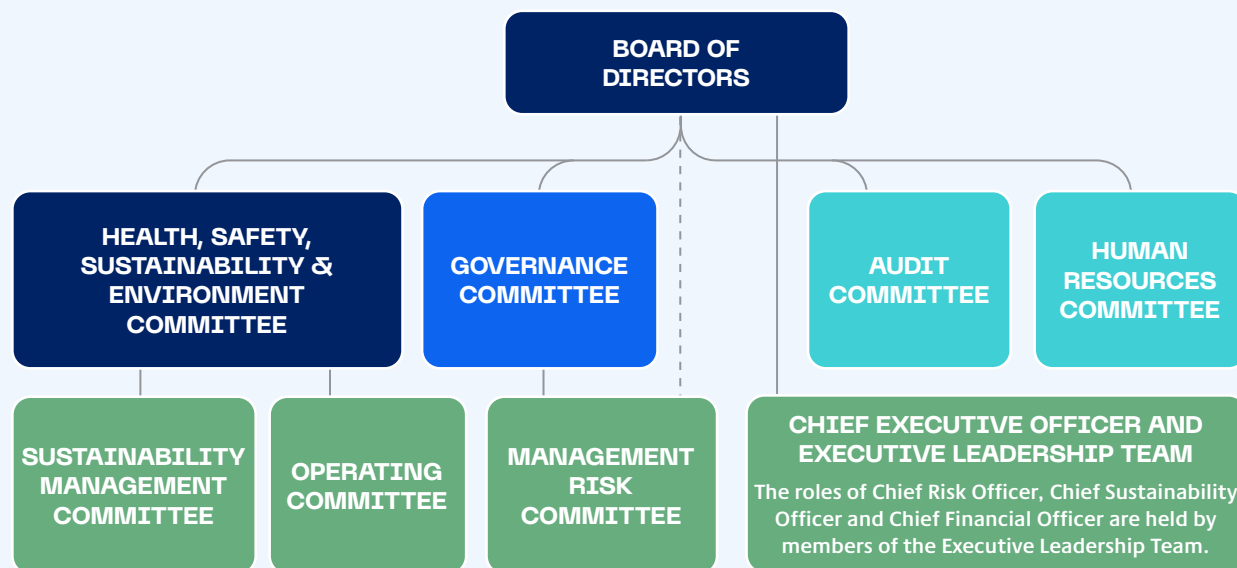
TC Energy is committed to providing our stakeholders with information on our approach to, and performance on, climate-related issues. This section summarizes our response against the four pillars of the TCFD: governance, strategy, risk management and metrics and targets, while also considering aspects of the additional requirements of IFRS S2. Supplementary information, including greater detail on climate-related risks and opportunities and our mitigation efforts, can be found in our annual [CDP Climate Change Questionnaire response](#).

TCFD AND IFRS S2 - CLIMATE-RELATED GOVERNANCE

TC Energy has an established governance structure with comprehensive risk management practices in place. This framework promotes accountability and transparency in how we identify, assess, and mitigate risks and opportunities facing the company. This includes topics related to sustainability matters, including climate change. Recognizing climate change is a global issue, we believe it is critical to manage climate-related risks and opportunities. Doing so allows us to uphold our responsibilities to capital markets, rightsholders, shareholders and stakeholders to enable the achievement of our long-term strategic priorities.

Our [2024 Management Information Circular \(MIC\)](#) contains further details on our governance structure and its characteristics, including Board and Board Committee responsibilities for overseeing the processes, controls and procedures used to monitor and manage climate-related risks, opportunities, and other sustainability-related matters.

Oversight structure for climate risks and opportunities



Legend



—— Primary oversight - - - - - Management Risk Committee outputs are reported to the Board of Directors

¹ Following the publication of IFRS S1 and IFRS S2, and at the Financial Stability Board's request, [the TCFD itself is now being subsumed into the ISSB](#) with the standard-setter [taking over the monitoring](#) of the progress on companies' climate-related disclosures from 2024.

**TCFD RECOMMENDATION AND IFRS S2 CORE CONTENT: DESCRIBE THE BOARD'S OVERSIGHT OF CLIMATE-RELATED RISKS AND OPPORTUNITIES.**

Oversight over our sustainability practices, including climate matters, is fully integrated into the responsibilities and accountabilities of the Board and its standing committees, all four of which are comprised entirely of independent directors. The Board has oversight over our sustainability practices, with the primary accountabilities at the Board committee level. Details of the four committees that have primary oversight over the effectiveness of TC Energy's strategies and performance related to climate-related risks and opportunities, are highlighted below. For more information, see accountability and decision-making in the [Governance section](#) of this report.

Board oversight

ROLE	ACCOUNTABILITIES
Board of Directors²	<p>The Board provides oversight and direction in the strategic planning process to ensure a robust strategy that supports TC Energy's vision of being North America's premier energy infrastructure company, now and in the future. The Board has oversight over our sustainability practices, with accountabilities at the Committee level.</p> <p>As part of our annual strategic plan review, management includes an assessment of energy fundamentals, the competitive environment, and the stakeholder landscape to identify opportunities and threats to our business strategy. This informs our strategic priorities and executive performance measures. We also periodically test our strategy against a range of potential energy supply and demand outlooks to assess the resilience of our asset portfolio. The Board reviews, discusses and approves the revised and extended five-year strategic plan during the strategic plan review.</p> <p>The Board and its committees are also responsible for risk oversight, including climate-related risks, and oversee the management systems and processes that identify, evaluate, prioritize, mitigate, and monitor risk. The Board reviews the enterprise risk register annually and is informed quarterly on emerging risks and how these risks are being managed and mitigated in accordance with TC Energy's risk appetite and tolerances.</p> <p>Our directors have a broad range of experience and skills in risk management. As a result they are highly engaged and qualified to participate in meaningful discussions with management regarding the company's key business risks.</p> <p>First-time director nominee candidates must have experience in industries similar to ours, have general business management experience or have experience with corporations or organizations that are similar in size and scope. Potential candidates are recommended based on their qualifications and independence and how these qualities balance with the skill set of the current Board. This assessment helps the Board determine the best mix of skills and experience including operations, health, safety, sustainability, and environment to guide our business operations and our long-term strategy.</p>

² Our [Corporate Governance Guidelines](#), [Board of Directors Charter](#) and the Charter for each committee can be found on our [website](#).



ROLE	ACCOUNTABILITIES
Health, Safety, Sustainability & Environment (HSSE) Committee	<p>The HSSE Committee oversees operational and major project execution risk, occupational and process safety, sustainability, security of personnel, environmental and climate change-related risks, and monitors development and implementation of systems, programs and policies relating to health, safety, sustainability, security, and environmental matters (HSSE matters) through regular reporting from management. This includes reviewing the performance and activities of TC Energy HSSE matters including compliance with applicable and proposed legislation, conformance with industry standards and best practices. It also includes reviewing reports on proposed climate change-related laws and regulations and their potential impact on TC Energy.</p> <p>The Committee monitors the actions and initiatives undertaken by TC Energy pertaining to the prevention, mitigation and management of HSSE including climate-related risks and opportunities, critical incidents related to our assets, operations, personnel and public safety, and business interruption risks that may adversely impact TC Energy. It receives updates on the environmental management program including biodiversity and land management, progress towards our GHG emission reduction targets, and voluntary public disclosures.</p> <p>The Committee maintains oversight of significant or complex capital projects. Starting in late 2022, the HSSE Committee began holding regular sessions, outside formal committee meetings, with members of senior management to receive status, cost and notable updates on certain capital projects. The HSSE Committee typically meets three times per year.</p> <p>Two management-level committees - Sustainability Management and Operating - report to the HSSE Committee. These committees are discussed further in the Management Oversight section below.</p>
Governance Committee	<p>The Governance Committee oversees the enterprise risk management (ERM) program, policy and framework and meets with management annually to ensure there is proper Board and committee oversight according to the terms of their charters. The Governance Committee recommends, along with the respective committee (or executive) assigned responsibility for specific risks, any enhancements to our risk management program and policies to the Board.</p> <p>The Governance Committee also has accountability for overseeing the strategy development process and works with management to identify and discuss emerging strategic issues. Key strategic issues as identified by the Governance Committee, including climate change, are elevated for discussion with the entire Board as part of the strategy development process.</p>
Audit Committee	<p>The Audit Committee oversees management's role in managing financial risk, including market risk, counterparty credit risk and cybersecurity, and monitors financial reporting, legal and regulatory developments affecting the Company's financial reporting processes, controls and disclosure, including climate-related financial disclosures. The Audit committee reviews climate change and sustainability-related disclosures in our financial disclosure documents and monitors regulatory developments affecting the financial disclosure landscape.</p> <p>The Audit Committee also oversees TC Energy's compliance policies and any material reports or inquiries received from regulators or governmental agencies.</p>
Human Resources Committee	<p>The Human Resources Committee reviews executive compensation levels, employee compensation and benefits programs.</p> <p>The Committee also reviews the corporate scorecard, which in 2023 included goals on safety, diversity of women and visible minorities in leadership and management of our GHG emissions.</p>

**TCFD RECOMMENDATION AND IFRS S2 CORE CONTENT: DESCRIBE MANAGEMENT’S ROLE IN ASSESSING AND MANAGING CLIMATE-RELATED RISKS AND OPPORTUNITIES.**

Climate-related implications are woven into the fabric of TC Energy’s corporate strategy, developed and implemented by our Chief Executive Officer (CEO) and our Executive Leadership Team (ELT). With significant environmental regulation and exposure to both climate-related risks and opportunities, we believe it is critical that these issues are monitored at the highest levels of management within the company.

The roles of the Chief Sustainability Officer (CSO), Chief Risk Officer (CRO) and Chief Financial Officer (CFO) hold climate-related matter responsibilities. The individuals holding these roles report directly to the CEO and provide links between functional leadership and the ELT, which includes the presidents of TC Energy’s business units.

We recognize the importance of these executives communicating with the Board on a regular cadence, ensuring climate-related issues are presented to the highest levels of the corporate structure.

For more information about management’s role in assessing and managing climate-related risks and opportunities and our organizational structure, please refer to our [2024 MIC](#) and the [Governance section](#) of this report.

Management oversight

ROLE	ACCOUNTABILITIES
Chief Executive Officer (CEO)	<p>The President and CEO position is at the highest level of executive leadership with responsibility for climate-related risks and opportunities.</p> <p>This position is responsible for the company’s overall leadership and vision in developing strategic direction, values, and business plans, and includes overall responsibility for operating and growing our business while managing climate-related risks, to create long-term sustainable value for our shareholders. The CEO and ELT develop and implement TC Energy’s strategy. Our CEO is also a member of the Board of Directors, and the corresponding accountabilities also apply.</p>
Executive Leadership Team (ELT)³	<p>The CEO and ELT develop and implement TC Energy’s strategy. In addition, ELT members hold the roles outlined below including membership of applicable committees.</p>
Chief Sustainability Officer (CSO)	<p>The CSO is responsible for directing the coordination, communication, and management of sustainability-related matters, particularly the intersection of climate-related risks and opportunities, governance, strategy, environmental and social issues. The CSO, the CEO and the rest of the ELT report to the HSSE Committee on climate-related issues. The CSO also communicates with management, shareholders, customers, employees, and other stakeholders to address climate-related matters.</p> <p>The CSO role formalizes our commitment to sustainability, coordinating efforts at the highest level of the organization. Part of the CSO role includes monitoring and preparing for mandatory reporting requirements in the jurisdictions in which we operate. The CFO and the CSO work collaboratively to provide transparent and reliable climate-related qualitative and quantitative disclosures in preparation for mandatory climate-related sustainability disclosures. This includes implementing appropriate and effective controls for climate-related information in our continuous disclosure documents.</p> <p>Currently, the CSO, Chief Compliance Officer and Chief Risk Officer (CRO) roles are held by the same individual, aligning oversight of climate risks and opportunities, compliance, and enterprise risk.</p>

³ Employees currently on our ELT are named on our [website](#).



ROLE	ACCOUNTABILITIES
Chief Financial Officer (CFO)	<p>The CFO is responsible for the accuracy and integrity of our financial statement disclosures, including financial implications associated with climate-related risks and opportunities. This includes monitoring and preparing for mandatory reporting requirements in the multiple jurisdictions in which we operate, and ensuring appropriate and effective controls are in place for climate-related data in our continuous disclosure documents.</p> <p>The CFO is responsible for our financing decisions and maintaining relationships with our investor base. This includes proactive engagement with the investment community, including credit rating agencies, with the objective of hearing their feedback and keeping them apprised of developments in our business. We factually communicate our prospects, risks, and challenges, including those related to climate. Sustainability remains a consideration in determining strategy, capital allocation and engagement with capital markets. The CFO group conducts research annually around the evolving sustainability preferences of our investors and financial partners which we consider in our decision making. The CFO is also responsible for sustainability-linked financing, including the management of our sustainability-linked loan and the required annual limited assurance of our Scope 1 and 2 corporate GHG emissions inventory and corporate GHG emissions intensity.</p> <p>The CFO and the CSO work collaboratively to provide transparent and reliable sustainability communications, reports and disclosures to our stakeholders.</p>
Chief Risk Officer (CRO)	<p>The CRO centralizes a pragmatic approach to facilitating the annual enterprise risk assessment and management of the enterprise risk register. The CRO is focused on prioritizing risks, clarifying roles and responsibilities, improving Board and management oversight, and providing the Board with quarterly in-depth presentations on the enterprise risks including climate-related risks. The CRO is responsible for ensuring the ERM program governance model, framework and processes are established, properly documented, and maintained in a manner that is suitable for our culture and operating model. The CRO also periodically reports enterprise risks and emerging risks to the Board and the Governance Committee and engages with the Board to obtain their insights for risk identification of enterprise risks.</p>
Sustainability Management Committee	<p>The Sustainability Management Committee provides strategic leadership and direction on sustainability-related issues, and is one of two separate management-level committees that reports to the Board HSSE committee.</p> <p>The Sustainability Management Committee debuted in July 2023 to develop cross-functional alignment on sustainability-related goals and commitments, and further integrate sustainability into company initiatives. The Committee includes senior leaders who meet regularly to examine current and emerging environmental, social, and governance matters. The Committee serves as a catalyst for new initiatives that support our sustainability strategy.</p>
Operating Committee	<p>The corporate Operating Committee is responsible for making enterprise decisions in support of management system governance, strategic system enhancements and operational risk management related to safety and certain environmental considerations. The Committee also ensures the adequacy and effectiveness of the Health, Safety and Environment (HSE) Management programs that are part of TC Energy's Operational Management System, TOMS.</p>
Management Risk Committee	<p>Chaired by the CRO, the Management Risk Committee is comprised of the ELT and is accountable for the management of emerging and enterprise risks including climate-related risks and implementation of risk mitigation plans. In addition to their primary oversight from the Governance Committee, the outputs of the Management Risk Committee are also reported to the full Board of Directors.</p>



TCFD AND IFRS S2 - CLIMATE-RELATED STRATEGY

Our vision is to be the premier energy infrastructure company in North America today and in the future by safely generating, storing and delivering the energy people need every day. Our goal is to develop, build and operate a portfolio of infrastructure assets that enable us to prosper irrespective of the pace and direction of energy transition and at all points in the economic cycle. We are a team of energy problem solvers working to deliver this energy in a safe, reliable, secure and affordable manner through lower-carbon energy solutions including natural gas, nuclear and pumped hydro storage.

TCFD recommendation and IFRS S2 core content: Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term; Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

Climate change presents risks and opportunities that could financially impact TC Energy's business and strategy. Evolving to a lower-carbon energy future is a serious obligation, it is not an imposition or an obstacle - it is an incredible opportunity, serving as a catalyst for future growth for our company with investments that are strongly aligned with our corporate strategic objectives, traditional risk preferences and core values. We support the aspirational pursuit of limiting the global temperature increase to 1.5°C above pre-industrial levels and believe there are substantial opportunities for our company to shift to a lower-emissions future.

Physical and transition risks associated with climate change have the potential to intensify TC Energy's enterprise risks that are outlined in our [2024 Management Information Circular](#). Our business, operations, financial condition and performance may be impacted by climate change policies and associated impacts. We monitor and report material climate policy and related developments through our ERM program to ensure our leadership and Board have visibility to the broader perspective, and that mitigation plans are applied holistically and consistently.

Climate-related strategy

Cultivate a focused portfolio of high-quality development and investment options

We assess opportunities to develop and acquire energy infrastructure that complements our existing portfolio, protects and grows our franchise businesses, enhances future resilience under a changing energy mix and diversifies access to attractive supply and market regions within our risk preferences.

We will advance selected opportunities, including lower-carbon growth initiatives in emerging sub-sectors where we are likely to build a strong competitive position in the future, to full development and construction when market conditions are appropriate, technology is proven, and project risks and returns are known and acceptable.

We monitor trends specific to energy supply and demand fundamentals, in addition to analyzing how our portfolio performs under different energy mix scenarios. This enables the identification of opportunities that contribute to our resilience, strengthen our asset base and improve diversification.

Maximize our competitive strengths

We continually seek to enhance our core competencies in safety, operational excellence, origination, project execution and stakeholder relations to deliver sustainable and enduring shareholder value.

Maximize the full-life value of our infrastructure assets and commercial positions

Maintaining safe, reliable operations and ensuring asset integrity, while minimizing environmental impacts, continues to be the foundation of our business.

Commercially develop and build new asset investment programs

Our extensive footprint offers significant in-corridor growth opportunities. This also includes possible future opportunities to deploy lower emission-intensive infrastructure technologies such as nuclear, pumped hydro storage, carbon capture and hydrogen, supporting a reduction of our GHG emissions footprint and that of our customers, while increasing the longevity of our existing assets.

The use of a disciplined approach to capital allocation supports our ability to maximize value over the short, medium and long term. We strive to develop projects and manage construction risk in a disciplined manner that maximizes capital efficiency and returns to shareholders. Safety, executability, profitability and responsible sustainability performance are fundamental to our investments.



OUR PLAN TO ACHIEVE OUR TARGETS

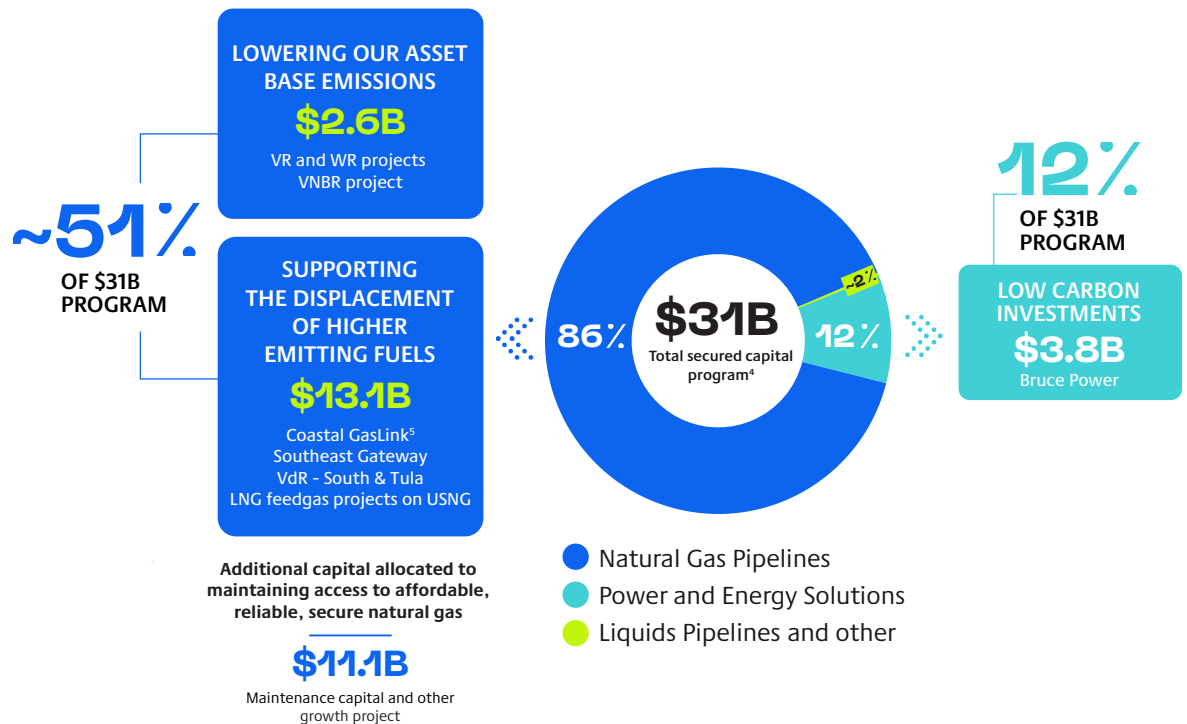
Our sustainability strategy is enabled by the capabilities and expertise of our workforce, the extent to which we embrace technology and encourage innovation, and embedding sustainability considerations in our existing business practices. We remain committed to our long-term target of positioning to achieve zero emissions from our operations, on a net basis, by 2050. We are currently assessing and balancing our interim GHG emission intensity reduction target and major components of our longer-term reduction plan against various criteria, including policy, regulatory, commercial and economic developments, the outcomes of our capital rotation program and the spinoff of our Liquids Pipelines business and will provide an update to our GHG targets in 2025.

-  **1** MODERNIZING OUR EXISTING SYSTEMS AND ASSETS
-  **2** DECARBONIZING OUR ENERGY CONSUMPTION
-  **3** INVESTING IN LOW-CARBON ENERGY AND INFRASTRUCTURE
-  **4** DRIVING DIGITAL SOLUTIONS AND TECHNOLOGIES
-  **5** LEVERAGING CARBON OFFSETS AND CREDITS

Our asset base offers significant in-corridor growth opportunities supporting our current incumbent positions in natural gas and nuclear energy. Our footprint also offers potential opportunities in pumped hydro storage, carbon capture and hydrogen. One such growth opportunity is the Valhalla North Berland River (VNBR) project, which will reduce our GHG emissions intensity on the Canadian NGTL System while connecting migrating supply to key demand markets. In the U.S., our VR and WR electrification projects will include upgrading compressor stations to hybrid drive

horsepower, reducing our Scope 1 GHG emissions. The successful completion of Bruce Power’s Major Component Replacements Unit 6, on budget and ahead of schedule, marked a significant milestone in Ontario’s largest clean energy initiative and one of Canada’s largest infrastructure projects. Our proposed Ontario Pumped Storage Project, an energy storage facility designed to provide 1,000 MW of flexible, clean energy to Ontario’s electricity system, will play a critical role in diversifying Ontario’s supply mix and achieving a net zero electricity grid.

Over 60% of sanctioned capital supporting the energy transition



⁴ Reflects Fourth Quarter 2023 MD&A. Includes non-recoverable maintenance capital of \$0.4 billion.

⁵ Includes TC Energy’s share of anticipated partner equity contributions to the project.

Reflects U.S./Canada foreign exchange rate of 1.32



We remain focused on refining the accuracy of our methane emissions data by employing new technologies and enhanced operational data. We have entered into a strategic partnership with Qube Technologies, investing in continuous methane monitoring and detection technology and advancing real-time measurement and localization of emissions. Additionally, we are advancing a continuous monitoring pilot program combining internal and external data points to create a real-time, holistic picture of methane emissions. The project aims to continually improve methane emissions detection and quantification methodologies, integrating sensing data with existing processes, optimizing emissions reduction and modernization initiatives.

We are also actively developing renewable natural gas (RNG) transportation hubs within our U.S. Natural Gas Pipelines footprint and we completed construction of Saddlebrook Solar, a solar power generation facility in Canada.

Through pilots and partnerships, we are advancing work in carbon capture, utilization and sequestration (CCUS) with the objective of providing industry with cost-effective, safe and reliable solutions to permanently store carbon dioxide. TC Energy is continuing its work on a carbon offset strategy that will enhance the value of lower-carbon opportunities, while simultaneously supporting abatement plans and efforts to position to be net zero by 2050.

Our focus on lower-carbon energy and infrastructure has leveraged strong partnerships with industry peers, customers and governments to understand how emerging technologies can work within the existing energy systems and how they may be utilized in our infrastructure. We believe TC Energy is well positioned to capitalize on these opportunities and will continue to meet the needs of its customers as the energy future evolves.

To hold ourselves accountable to achieving our climate-related goals, in 2022, we embedded sustainability goals into our corporate scorecard to progress and advance

strategic priorities including growth and energy transition. Our 2023 corporate scorecard included goals on safety, diversity of women and visible minorities in leadership and management of our GHG emissions. TC Energy's 2024 grant of Performance Share Units (PSUs), a mid-term incentive plan which vests after a three year period includes a methane intensity reduction performance metric to support our GHG emissions reduction plan.

Sustainable finance also plays a critical role in enabling the transition to a lower emissions economy and the advancement of clean technology and innovation. Securing transition finance in the energy sector requires a clear demonstration of measurable progress towards the achievement of verifiable sustainability-related goals. In 2022, we added sustainability commitments to one of our credit facilities as we continue to build sustainability performance metrics into our business strategy. Known as a sustainability linked loan, we report to our lenders on progress against a \$3 billion loan tied to GHG emissions reduction and gender diversity goals.

TCFD AND IFRS S2 - CLIMATE-RELATED RISKS AND OPPORTUNITIES

A summary of the climate-related risks and opportunities that may affect our company are detailed in the following pages. The tables describes potential risk events, mitigation activities and controls related to the risks. These are a subset of the risks identified through our ERM program, which are regularly monitored and revised annually. Several ongoing strategic activities and initiatives such as the Focus Project, the spinoff of our Liquids Pipelines business, and opportunities supporting our deleveraging targets mean we will be reassessing the potential financial impacts of our climate-related risks and opportunities. We identified, and are working towards adopting Key Risk Indicators (KRIs) for risk events that may impact our ability to achieve our strategic objectives and plan to undergo a deeper scenario analysis to stress test the business portfolio against a 1.5°C scenario. These will help inform our reassessment of the financial impacts.

The climate-related risks and opportunities that follow may not be material under securities laws. Information on the material risks for TC Energy can be found in the [2023 Annual Report](#) and our most recent quarterly report, available on our [website](#), [SEDAR](#) and [EDGAR](#).

Risk mitigant examples*



MARKET (Supply/demand, access to capital)

- Leveraging our footprint to invest in high barrier to entry markets
- Shifting our asset portfolio mix to align with the pace of energy transition
- Selectively advancing low-carbon growth opportunities
- Candid and proactive investor engagement; disciplined capital allocation



PHYSICAL



Resilient asset designs



Emergency response plans



Emergency power generators



Insurance



REGULATION & LEGAL

- Advocate for policies that are consistent with the aspirational pursuit of limiting a global temperature increase to 1.5°C.



REPUTATIONAL

- Carefully manage relationships with customers, suppliers, regulators and other stakeholders and offer clear, candid communication to build trust and support.

Opportunity realization examples*



MARKET

- Expanding natural gas infrastructure to support growing LNG export demand
- Southeast Gateway project supplies over 1 Bcf a day of natural gas to Mexico's Yucatan Peninsula, displacing high sulfur diesel and fuel oil
- Actively developing RNG transportation hubs
- Completed construction of Saddlebrook Solar



PRODUCTS & SERVICES

- New opportunities in emission-less nuclear power and pumped hydro energy storage
- Innovating round-the-clock emissions-less power solutions
- Ability to offer renewable power and carbon attributes through ~800 MW of contracted wind and solar generation



ENERGY SOURCES

- Replacing gas-powered turbines at compressor stations with hybrid or electric motors
- Advancing carbon capture technology to reduce our scope 1 emissions
- Using solar arrays to power meter stations at some of our renewable natural gas facilities
- Shifting vehicle fleet to electric vehicles

* This does not represent all climate risks and opportunities nor does it reflect the order of importance. For a comprehensive discussion of our climate risks and opportunities, please refer to the tables below.



Summary of climate-related risks

RISK DEFINITION AND DESCRIPTION	POTENTIAL FINANCIAL IMPACT	MITIGATION MEASURES AND CONTROLS
TRANSITION RISKS		
REPUTATIONAL RISK		
<p>As concerns around climate change accelerate, there is growing pressure on energy companies to reduce GHG emissions, enhance disclosures and manage climate-related risks.</p> <p>Our operations and growth prospects require strong relationships with stakeholders and rightsholders including customers, Indigenous communities, landowners, suppliers, investors, governments and government agencies, financial institutions and environmental non-governmental organizations.</p>	<p>Inadequately managing stakeholder expectations and concerns, including those related to climate and sustainability, can have a significant impact on our operations and projects, infrastructure development and overall reputation. It could also affect our ability to operate and grow.</p>	<p>We aim to communicate transparently to all rightsholders and stakeholders on sustainability-related topics. We annually publish our corporate GHG emissions intensity, and in 2023, we published reports on the Reliability of Methane Emissions Disclosure and Climate-related Lobbying to provide more transparency and insight into our climate-related goals and efforts. We continue to assess our emission reduction targets and major components of our longer-term reduction plan against various criteria, including policy, regulatory, commercial and economic developments, the outcomes of our capital rotation program and the spinoff of our Liquids Pipelines business. We carefully manage relationships with our customers, suppliers, regulators and other stakeholders and offer clear, candid communication to investors in order to build trust and support.</p> <p>As we work to build the energy system of the future, we recognize the importance of working together, in common cause, with communities, governments and our customers. Our core values – safety, innovation, responsibility, collaboration and integrity – guide us in building and maintaining our relationships as well as our interactions with stakeholders.</p> <p>In 2023, TC Energy's CEO, CFO, other members of management, and our Investor Relations team participated in approximately 550 meetings with shareholders and bondholders, including over 60 meetings on sustainability- and ESG-specific topics. Of the approximately 410 meetings with shareholders, over 200 meetings took place following the July 27, 2023 announcement of TC Energy's intention to spinoff the Liquids Pipelines business.</p> <p>Beyond our core values, we have specific stakeholder programs and policies that shape our interactions, clarify expectations, assess risks and facilitate mutually beneficial outcomes. We are proud of the strong relationships we have built with stakeholders across our geographies, and we are continuously seeking ways to strengthen these relationships. We are committed to sharing information and seeking public input, documenting the entire stakeholder engagement process including the issues raised by stakeholders and rightsholders, along with the ways we address these issues. We engage and consult early and often, invite feedback, provide updates and address concerns throughout the regulatory process and throughout operations, with preference for addressing concerns through direct and respectful discussion.</p> <p>Additional reputational risk mitigation efforts include:</p> <ul style="list-style-type: none"> • Considering GHG emission reductions and climate aspects in our capital allocation framework and decision-making process. • Maintaining our commitment to transparent disclosure on our progress through centralized hubs to access climate change-related and sustainability communications including our environmental, social and governance and sustainability webpages. • Advocating for a thoughtful and balanced approach to energy development.

**RISK DEFINITION AND DESCRIPTION****POTENTIAL FINANCIAL IMPACT****MITIGATION MEASURES AND CONTROLS****REGULATION (CURRENT AND EMERGING) AND LEGAL RISK**

Our ability to construct and operate energy infrastructure requires regulatory approvals and is dependent on evolving policies and regulations by government authorities. This includes changes in regulation that may affect our projects and operations into the future, potentially affecting asset financial performance.

Climate-related litigation is evolving, becoming an increasingly common process to hold organizations accountable for climate-related physical and transition risks, which could impact our ability to operate our assets.

We own assets and have business interests in a number of regions subject to GHG emissions regulations, including GHG emissions management and carbon pricing policies. Across North America, there are new and evolving initiatives and policies in development at the federal, regional, state and provincial levels aimed at reducing GHG emissions that could affect our business.

Adverse impacts on competitive geographic and business positions could result in the inability to meet our growth targets through missed or lost organic, greenfield and brownfield opportunities. Financial impacts of denied or delayed projects could include lost development costs, loss of investor confidence and potential legal costs from litigation.

Regulations could also increase operational costs, due to complying with new or more stringent regulations, resulting in the inability to earn a reasonable return on our invested capital.

There are new mandatory climate-related disclosure requirements being issued in jurisdictions in which we operate. These disclosure requirements may impact how we report our climate-related risks and opportunities, strategy, risk management, and GHG emission metrics and targets. We continue to monitor these developments and progress activities in anticipation of these new requirements. We also actively assess and submit comments to regulators as additional new and evolving initiatives are undertaken and policies are implemented. We monitor the political and public policy environment, and manage our relationships with multilateral stakeholders in the development and operation of our assets.

We advocate for policies that are consistent with our climate-related goals, support deployment of clean energy systems, a robust energy trade, a strategic diversification of our energy mix, and the aspirational pursuit of limiting a global temperature increase to 1.5°C above pre-industrial levels. See our [Climate-related Lobbying Report](#), and [climate-related lobbying update](#), for details.

We also identify emerging risks including customer, regulatory and government decisions, as well as innovative technology developments, and report on our management of these risks quarterly to the Board through the ERM program. This information informs our capital allocation strategy and supports adaptation to changing market conditions. Scenario analysis is also built into our strategic outlook.



RISK DEFINITION AND DESCRIPTION	POTENTIAL FINANCIAL IMPACT	MITIGATION MEASURES AND CONTROLS
TECHNOLOGY RISK		
<p>To be competitive, we must offer integral energy infrastructure services in supply and demand areas and in forms of energy that are attractive to customers.</p> <p>This includes energy evolution opportunities such as energy efficiency, electrification, renewable and alternative energy sources, batteries and other energy storage, and low-carbon infrastructure to support RNG, carbon capture and sequestration and hydrogen, along with traditional energy sources.</p>	<p>Developing and deploying new technologies and new products inherently involves a degree of financial risk associated with escalating costs, uncertain outcomes and delays to anticipated in-service schedules.</p> <p>Should alternative lower-carbon forms of energy result in decreased demand for our services on an accelerated timeline versus our pace of depreciation, the value of our long-lived energy infrastructure assets could be negatively impacted.</p>	<p>We have a dedicated energy transition team to assess relevant technologies and opportunities to support business resiliency across a range of future energy scenarios.</p> <p>We maintain a diverse portfolio of assets and use portfolio management to divest of non-strategic assets, effectively rotating capital while adhering to our risk preferences and focus on per share metrics. We conduct analyses to confirm the longer-term resilience of the supply and demand markets we serve as part of our energy fundamentals and strategic development reviews.</p> <p>We will advance selected opportunities, including lower-carbon growth initiatives in emerging sub-sectors where we are likely to build a strong competitive position in the future, to full development and construction when market conditions are appropriate, technology is proven, and project risks and returns are known and acceptable.</p> <p>Measured investment in emerging technologies will develop capabilities that are complementary to our core businesses, without taking significant commodity price, volumetric or technology risk.</p> <p>We recover depreciation through our regulated pipeline rates, which is an important lever to accelerate or decelerate the return of capital from a substantial portion of our assets. We also monitor signposts including customer, regulatory and government decisions as well as innovative technology development to inform our capital allocation strategy to respond to changing market conditions.</p>

**RISK DEFINITION AND DESCRIPTION****POTENTIAL FINANCIAL IMPACT****MITIGATION MEASURES AND CONTROLS****ALLOCATION STRATEGY TO RESPOND TO CHANGING MARKET CONDITIONS.****MARKET RISK**

Access to capital: We require substantial amounts of capital in the form of debt and equity to finance our portfolio of growth projects and maturing debt obligations at costs that are sufficiently lower than the returns on our investments. Significant deterioration in market conditions for an extended period and changes in investor and lender sentiment could affect our ability to access capital at a competitive cost.

The mandates of institutional investors, credit rating agencies, lenders and insurers are increasingly considering climate-related risks and opportunities. Investor confidence in our energy transition plans could affect our ability to access capital and/or insurance coverage including at a competitive cost.

Supply/demand: The continued focus on climate change and the transition to a lower-carbon economy may affect future global energy demand and use, including the composition/mix of types of energy used by industry and individual consumers.

Access to capital: A higher cost of capital could negatively impact our ability to deliver an attractive return on our investments or inhibit our growth. Significant increases to interest rates could result in a higher cost of borrowing and therefore negatively impact our earnings.

Supply/demand: Changes in the North American energy mix could affect the long-term growth of our customer base and reduce demand for the products we transport, which could have a negative impact on revenues.

While climate change affects nearly all economic sectors, the level and type of exposure and the impact of climate-related risks differs by sector, industry, geography, and organization.

Access to capital: We operate within our financial means and risk tolerances, maintain a diverse array of funding levers and utilize capital rotations as an important component of our financing program. Climate-related risks and opportunities remain a consideration in determining strategy, capital allocation and capital market engagement. The use of a disciplined approach to capital allocation supports our ability to maximize value over the short, medium and long term while protecting and growing our incumbencies. We allocate capital in a manner that improves the breadth and cost competitiveness of the services we provide, extends the life of our assets, increases diversification and strengthens the carbon-competitiveness of our assets.

We have candid and proactive engagement with the investment community, including credit rating agencies, with the objective of hearing their feedback and keeping them apprised of developments in our business and factually communicating our prospects, risks and challenges as well as sustainability-related updates. We conduct research annually around the evolving sustainability preferences of our investors and financial partners which we consider in our decision making.

Supply/demand: Analyzing a wide range of energy scenarios, we continue to see natural gas playing a critical role, and our assets are strategically positioned to connect low-cost supply to critical markets.

Additional market risk mitigation efforts include:

- Shifting our longer-term portfolio mix to align with pace of energy transition while capturing lower-carbon growth opportunities with attractive returns
- Leveraging our footprint to invest in high barrier to entry markets
- Commitment to transparent disclosure on the progress we're making and our plans to achieve our targets
- Continue to enhance balance sheet strength and flexibility to ensure access to multiple sources of capital



RISK DEFINITION AND DESCRIPTION	POTENTIAL FINANCIAL IMPACT	MITIGATION MEASURES AND CONTROLS
PHYSICAL RISKS		
ACUTE AND CHRONIC		
<p>Physical risks could include, but are not limited to, severe weather events, wildfires, and longer-term shifts in climate patterns, temperature and precipitation. It is difficult to predict the timing, frequency, or severity of such events. Weather-related delays can also exacerbate execution risks of our investments in large infrastructure projects, which involve substantial capital commitments, including project costs and schedules. Similarly, weather-related delays can also impact our ability to operate our in-service assets.</p> <p>Fluctuations in seasonal weather patterns or temperature can affect the efficiency and production of our natural gas-fired power plants.</p> <p>Significant changes in temperature and weather could have many effects on our business, ranging from the impact on demand, availability and commodity prices, to efficiency and output capabilities. Extreme temperature and weather can affect market demand for power and natural gas and can lead to significant price volatility, as well as restrict the availability of natural gas and power if demand is higher than supply.</p>	<p>Business interruption caused by physical changes to our environment could result in a decrease in revenues and increase in operating costs, legal proceedings or regulatory actions, or other expenses, all of which could reduce our earnings.</p> <p>Physical risks from climate change could carry financial implications, such as costs resulting from direct damage to our assets, loss of revenues due to business interruption or indirect effects such as value chain disruption. We may experience increased insurance premiums and deductibles, or a decrease in available coverage, for our assets in areas subject to severe weather.</p>	<p>Our engineering standards are regularly reviewed to confirm assets remain designed and operated to withstand the potential impacts of climate change. Our emergency response plans are focused on quickly and effectively responding to emergencies and mitigating impacts in a timely manner. We also maintain insurance as a mitigative measure to reduce the financial impact associated with damage to assets due to extreme weather events, but insurance does not cover all events in all circumstances. Should an event occur, our Emergency Management Program (within TOMS) would manage our response to natural disasters, which include catastrophic events such as forest fires, tornadoes, earthquakes, floods, volcanic eruptions and hurricanes.</p> <p>Additional mitigations to address acute and chronic physical risks include:</p> <ul style="list-style-type: none"> • Enhanced inspection and maintenance of assets and pipeline rights-of-way (including on, and in the vicinity of, pipeline crossings at watercourses), emergency and crisis response planning and training, and business continuity planning including recovery, risk mitigation and restoration • Utilization of historical weather data and systems to forecast weather events to design more resilient sites and facilities • Alignment on contingency planning with other parties in broadly based logistics networks, which enables us to coordinate shutdowns in advance of severe weather events and make resumption of energy supply a priority following a storm • Planning for extreme weather events in operational response plans, including the installation of on-site emergency generators at many of our operational facilities to provide power in the event of extended outages (e.g., during ice storms) <p>We also partner with research organizations and industry groups to monitor the resilience of assets to physical risks, including severe weather events such as 100- and 200-year rainfall events. This helps determine maintenance needs or replacement of company assets, including existing pipelines. To better support geohazard risk management, TC Energy implemented a customized web-based geohazard platform (GeoForce) to identify, inventory, and track geohazards across our U.S. pipeline system. The platform was built within the Environmental Systems Research Institute (ESRI) ArcGIS Enterprise environment and leverages a diverse amount of ESRI products.</p>



Summary of climate-related opportunities

OPPORTUNITY DEFINITION AND DESCRIPTION	POTENTIAL POSITIVE FINANCIAL IMPACT	REALIZATION MEASURES
RESOURCE EFFICIENCY		
<p>Improving efficiencies and modernizing our existing systems and assets provides one of the greatest opportunities to directly influence our GHG emissions reduction efforts across our asset base.</p> <p>We continue to improve operational efficiencies and factor climate-related considerations into our decision making around new projects, modernization, maintenance, electrification and enhanced leak detection.</p>	<p>We have an opportunity to achieve direct cost savings through modernization and optimization of existing infrastructure.</p>	<p>Efforts to advance this opportunity include investing in operational efficiencies and enhancements that improve reliability, while reducing GHG emissions. We are modernizing our existing systems and assets by integrating technologies such as gas recovery and recompression systems and hybrid gas and electric compressor units.</p> <p>To manage fugitive emissions, we are continually assessing and deploying new practices and technologies to improve the efficiency and effectiveness of our LDAR programs and investing in continuous methane emission detection and monitoring technology. Vented emissions are being mitigated through improved operating and maintenance activities and adopting mobile incineration technology and by implementing new procedures and practices.</p>
ENERGY SOURCES		
<p>A key strategic focus area (and one of the five reduction levers in our GHG Emissions Reduction Plan) is to decarbonize our energy consumption, thereby reducing our overall GHG emissions intensity. Decarbonizing energy consumption along our natural gas pipeline systems is expected to provide ongoing additional capital investment opportunities that will meet our risk preferences while supporting our GHG emissions reduction targets.</p>	<p>By decarbonizing our asset base, we're enhancing organizational readiness to manage exposure to GHG regulatory compliance costs, creating efficiencies, reducing operating costs and increasing the value of our assets.</p>	<p>By replacing gas-powered motors with electric motors at our natural gas pipeline compressor stations, advancing carbon capture technology, and transitioning our company fleet to electric vehicles, we are reducing greenhouse gas emissions from our operations.</p> <p>Additional energy source realization measures include:</p> <ul style="list-style-type: none"> • The Valhalla North Berland River (VNBR) project in Canada is expected to add approximately 400 million cubic feet per day of incremental capacity utilizing non-emitting electric compression. In the U.S., our VR and WR electrification projects will include upgrading compressor stations to hybrid drive horsepower, reducing our Scope 1 emissions. • We are using solar arrays to power meter stations at some of our renewable natural gas (RNG) interconnects in the U.S. The solar power generated at each location will help decrease TC Energy's GHG emissions impact by using 100% renewable energy to power the RNG interconnects.



OPPORTUNITY DEFINITION AND DESCRIPTION	POTENTIAL POSITIVE FINANCIAL IMPACT	REALIZATION MEASURES
PRODUCTS AND SERVICES		
<p>We continue to anchor our strategy and capital allocation decisions in energy fundamentals and policy direction while abiding by a conservative set of risk preferences. We are uniquely positioned to advance energy transition opportunities across a variety of future scenarios, building on over 70 years of experience and portfolio of infrastructure assets.</p> <p>Long term, we believe there will be a growing need for a reliable supply of resources as the energy transition unfolds. We can play a vital role in energy transition and will continue to build expertise and capabilities in emerging technologies and markets that we believe will fit these criteria in the future and have synergies with our natural gas business. There is also opportunity to provide lower-carbon solutions for our customers and industry.</p>	<p>Our incumbent position allows us access to markets with high barrier to entry, enabling us to advance low-carbon projects with attractive returns. We can pursue diverse opportunities aligned with our risk preferences.</p> <p>Within our Power & Energy Solutions business unit, we are strategically focusing on baseload and firming opportunities where we have competitive advantage, we have the potential to increase revenues by capitalizing on the growing demand for lower-carbon power.</p>	<p>Our power business continues to supply reliable, affordable and sustainable energy. We currently own or have interests in facilities that generate approximately 4,600 megawatts of power-generation capacity, over 75 per cent of which is emissions-less.</p> <p>We have approximately 400 MW of wind and solar generation Power Purchase Agreements (PPAs) and associated environmental attributes in Alberta, and approximately 400 MW of wind generation PPAs and associated environmental attributes in the U.S. These PPAs allow us to generate incremental earnings by offering renewable power products to our customers.</p> <p>We will continue to invest modest amounts of capital in other energy solutions to develop our capabilities in areas where we are likely to build a strong competitive position in the future. We expect our investments to be underpinned by rate-regulated and/or long-term contracts, allowing us to deliver low-risk utility-like returns.</p> <p>As of Q1 2024, of our \$31 billion sanctioned capital program, over 60 per cent is weighted towards supporting the energy transition. Bruce Power's Project 2030 has a goal of achieving a site peak output of 7,000 MW by 2033 in support of climate change targets and future clean energy needs. It is focused on continued asset optimization, innovation and leveraging new technology, which could include integration with storage and other forms of energy, to increase the site peak output.</p> <p>While the types of energy we deliver may change, how we continue to invest and grow will be very familiar. Power and Energy Solutions weighting in our portfolio is expected to gradually grow over time, heavily weighted to nuclear and pumped hydro storage.</p> <p>Some examples of projects under development are:</p> <ul style="list-style-type: none"> • Canyon Creek Pumped Storage: we are utilizing the existing site infrastructure from a decommissioned coal mine to develop a pumped hydro storage project. The facility is expected to provide up to 37 hours of on-demand, flexible, clean energy and ancillary services to the Alberta electricity grid. • Proposed Ontario Pumped Storage Project (OPSP): Along with the Saugeen Ojibway Nation, our prospective partner, we continue to advance the OPSP, an energy storage facility designed to provide 1,000 MW of flexible, clean energy to Ontario's electricity system using a process known as pumped hydro storage. <p>Additional efforts to realize our products and services include:</p> <ul style="list-style-type: none"> • Exploring ways to leverage our nuclear position into small modular reactors. • Pioneering a combined wind, solar and long-duration pumped hydro portfolio that positions customers to manage hourly power needs with cost certainty and achieve emissions reduction goals by sourcing power from lower emission-intensive assets.



OPPORTUNITY DEFINITION AND DESCRIPTION	POTENTIAL POSITIVE FINANCIAL IMPACT	REALIZATION MEASURES
MARKETS		
<p>Our natural gas pipeline systems are enabling energy transition, as a reliable, high-efficiency energy source that is supporting the displacement of coal-fired power, backstopping the intermittency of renewable power sources and creating the foundation to expand hydrogen and other new energy sources. We see the North American energy mix continuing to evolve, requiring an all-of-the-above solution, particularly as an energy transition fuel for Mexico. For over a decade, Mexico has been undergoing a significant transition from fuel oil and diesel as its primary energy sources for electric generation to using natural gas. As a result, new natural gas pipeline infrastructure has been and continues to be required to meet the growing demand for natural gas. Our existing network of assets, customers and suppliers provide a mutual opportunity in which we can tailor solutions to meet their clean energy needs.</p>	<p>Our expertise and existing infrastructure across North America positions us to capitalize on growth opportunities, increasing revenue from participation in growing markets like LNG export, carbon capture and hydrogen.</p>	<p>Our strategy is to maximize the value of our existing portfolio by investing in traditional energy infrastructure while developing new energy capabilities, protecting our value proposition for decades to come.</p> <p>TC Energy has an industry-leading, diverse portfolio of projects at various stages of development, that are expected to continue to grow and evolve. Our extensive asset footprint offers possible future opportunities to invest modest capital in other energy solutions which will help reduce customer GHG emissions footprints while supporting longevity of our existing assets.</p> <p>Market opportunities include:</p> <ul style="list-style-type: none"> • LNG: expanding our natural gas infrastructure in key locations and developing new projects to provide connectivity to LNG export terminals, both operating and proposed, in Canada, the U.S. and Mexico, supporting the displacement of coal-fired power generation globally. We transport approximately 30 per cent of the continent’s natural gas today, and we are the only infrastructure company with strategic natural gas pipeline corridors connecting low-cost basins to high-demand markets in each of Canada, the U.S. and Mexico. Growing global LNG demand is translating into incremental demand for LNG exports from this continent. • Our Southeast Gateway project is expected to supply over 1 Bcf a day of natural gas to Mexico’s Yucatan Peninsula, displacing high sulfur diesel and fuel oil. • RNG: We are actively developing RNG transportation hubs within our U.S. Natural Gas Pipelines footprint. These hubs are designed to provide centralized access to existing energy transportation infrastructure for RNG sources, such as farms, wastewater treatment facilities and landfills. The development of these hubs is an important step towards the acceleration of methane capture projects and the concurrent reduction of GHG emissions. • Hydrogen: We are also advancing multiple hydrogen production opportunities to potentially serve long-haul transportation, power generation, large industrials and heating customers across the U.S. and Canada. Measured investment in emerging technologies, like hydrogen, will help us expand our capabilities, focusing on opportunities that complement our core business and where we can obtain favourable and strategically-consistent commercial arrangements such as rate regulation and/or long-term contracts. <p>We will continue to invest in our natural gas pipelines and storage businesses to meet customer demand and strengthen our diversified, industry-leading position.</p>



OPPORTUNITY DEFINITION AND DESCRIPTION	POTENTIAL POSITIVE FINANCIAL IMPACT	REALIZATION MEASURES
RESILIENCY		
<p>TC Energy sees enormous potential for cohesive regional energy solutions that provide sustainable energy security to Canada, the U.S., and Mexico. We view current and emerging climate-related regulation and policy development as an opportunity to contribute to the development of strong and sound policy that will promote industry innovation and ultimately, resiliency.</p> <p>Lowering the GHG emissions intensity of our operations while developing the next generation of lower-carbon energy solutions will improve resiliency under all energy scenarios.</p>	<p>Regulatory certainty will help attract capital, facilitate cost-effective emissions reductions, allow us to better understand GHG regulatory compliance exposure, and encourage North American energy sector competitiveness.</p>	<p>We have a long track record of turning policy and technology changes into opportunities, advocating for policies that are consistent with our climate-related goals. We proactively manage emissions through asset-level efficiency improvements and installations, and by taking an industry-leading role in carbon markets across North America. We are upgrading our infrastructure and processes and collaborating with suppliers, customers and peers to effectively measure, monitor and reduce GHG emissions.</p> <p>Select carbon capture and storage initiatives include:</p> <ul style="list-style-type: none"> • Collaborating with Minnkota Power Cooperative (Minnkota), Mitsubishi Heavy Industries and Kiewit on Project Tundra, a next-generation technology carbon capture and storage project. • Working with an industry partner on the Alberta Carbon Grid (ACG) – a world-scale carbon capture and storage system in development to help the province’s industrial sectors sequester their emissions. • Jointly invested with Tennessee Valley Authority (TVA) to support studying carbon capture technology on TVA’s natural gas combined cycle fleet across its territory. <p>TC Energy is continuing its work on a carbon offset strategy that will enhance the value of lower-carbon opportunities, while simultaneously supporting abatement plans and efforts to position to be net zero by 2050. We are leveraging our trading expertise to participate in carbon markets and earning incremental returns through virtual power purchase agreements.</p>



TCFD AND IFRS S2 - CLIMATE-RELATED SCENARIOS

TCFD recommendation and IFRS S2 core content: Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

We recognize that future energy systems will evolve. As part of our strategic planning cycle, we monitor trends and analyze our business resilience against a range of potential energy supply and demand fundamentals, also known as scenario analysis. In this context, resilience refers to our ability to tolerate disruptions and adapt to external changes or uncertainties that may affect our ability to meet our long-term goals and remain financially resilient under most situations and conditions.

We monitor the pace and magnitude of energy transition using various signposts such as policy, technology, consumer preferences, reliability and sustainability and look for material shifts that pose threats or create opportunities. We analyze the potential impacts to TC Energy under an accelerated lower-carbon scenario to gain an in-depth perspective on the quantitative and qualitative implications for our footprint, growth opportunities, risks and for portfolio optimization. Our understanding of these factors plays a critical role in helping us manage several of our enterprise risks. We plan to undergo a deeper scenario analysis effort to stress test the business portfolio against a 1.5°C scenario.

Scenarios make a variety of assumptions about future trends, including the impact of climate policies on the energy mix, the rate of technological change for energy systems and supply and demand changes for oil and gas, both domestic and global. These scenarios offer alternative outlooks for the energy future, but do not describe what will or should happen. With this in mind, we do not assign probabilities to the scenarios, and investors should not rely on them to make investment decisions.

SCENARIO OVERVIEW

Since 2018, we have considered a variety of scenarios as part of our strategic planning process. In each instance,

analysis of multiple long-term energy scenarios, including a below 2°C scenario, is foundational to the company's strategic planning process.

These analyses include evaluation of supply and demand as well as market drivers related to: liquids, natural gas and power. In addition to the above scenario analyses, we conduct recurring reviews and analyses of major accelerated and net zero scenarios, which includes an annual review of the International Energy Agency's (IEA) World Energy Outlook. We evaluate the penetration of renewable energy, LNG trade, carbon capture, hydrogen demand and other meaningful trends.

We understand the importance of continually updating our view of market fundamentals in the context of energy transition. Our projections are informed by internal analysis, third-party research and the advice of outside experts on energy market fundamentals. Given the nature of our business, we place significant emphasis on ensuring senior leadership and the Board are updated on the resilience of our asset portfolio over a range of potential energy supply and demand outcomes as part of our strategic planning cycle and financial outlook planning. Material presented incorporates key scenarios, climate-related developments, risks and opportunities, to inform processes for governance, risk management and strategic planning.

SCENARIO OUTCOMES

We have conducted an 'accelerated low-carbon scenario' deep dive to stress test our portfolio. The scenario indicated that our assets would be largely insulated from fossil fuel demand destruction to 2030. Post-2030, when policy shifts are expected to reduce demand for fossil fuels, TC Energy's positioning in the lowest-cost gas basins and projected LNG growth out of North America are expected to maintain the resiliency of our assets. We remain observant of potential future dependence on LNG exports as North American demand declines from reduced gas-fired power. In this scenario, existing Canadian oil sands production remains resilient, but future growth would stall. Our current Power and Energy Solutions business, centered around Bruce Power, is not materially impacted in this analysis. TC Energy believes it is critical to

consider more accelerated emissions-reduction scenarios as part of its overall corporate strategic outlook to identify risks and opportunities.

Under a 'base scenario' analysis, the market fundamentals show consistent positive momentum for natural gas, oil and electricity businesses in the medium term and resiliency in the long-term. A sustained global and North American natural gas and oil demand outlook through to 2040 also exhibits resilience due to TC Energy's central feedstock role and favourable economics, with natural gas serving as a core energy source through to 2050. Continuously rising global power demand to 2050, particularly North American, is projected to drive economic growth and decarbonization. The new technology and goals being put forward by industry will be important drivers of energy transformation.

The need for new forms of clean energy is expected to generate investment opportunities for us in the future. New growth prospects include leveraging our existing assets, including hydrogen and RNG, and capitalizing on our capability to execute complex and capital-intensive projects such as CCUS. We also see the opportunity to participate in the growing electrification movement through our Power and Energy Solutions business, which can support modernization of our pipeline assets, thus enhancing the resiliency of our businesses.

Bringing it all together, we recognize there are multiple ways that energy transition could unfold. Our strategies are designed to deliver long-term value no matter what the future brings. We operate under a low-risk and enduring utility-like business model, which offers the scale and presence to provide essential and highly competitive infrastructure services. This enables us to maximize the full-life value of our long-life assets and commercial positions throughout all points of the business cycle.

We have a demonstrated track record of responding to a constantly evolving external environment. Our business portfolio provides diversification as the energy future unfolds, allowing us to allocate capital to various opportunities across the energy infrastructure sector, within our risk preferences, as signposts indicate.



TCFD AND IFRS S2 CLIMATE-RELATED RISK MANAGEMENT

TCFD recommendation and IFRS S2 core content: Describe the organization's processes for identifying and assessing climate-related risks; describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.

Risk management is embedded across all our activities and is integral to the successful operation of our business. We integrate climate-related risks into broader groups encompassing health, safety, financial, reputational, environmental, regulatory, and legal categories. Our strategy ensures that risks and related exposures align with our objectives and risk tolerances.

We manage risk through a centralized Enterprise Risk Management (ERM) program that systematically identifies enterprise-level risks, including climate-related risks, that could materially impact the achievement of our objectives. The program and framework follow a principled approach and include:

- an enterprise risk register,
- an enterprise risk heat map and report consisting of risk assessment, mitigation controls and KRIs, and
- quarterly emerging risk reports.

The purpose of our ERM program is to address risks to, or yielding from, the execution of business strategies, as well as enabling practices that allow us to identify and monitor emerging risks. Specifically, the ERM program and its framework provide an end-to-end process for risk identification, analysis, evaluation, mitigation, monitoring, and reporting.

Our Board retains general oversight of all enterprise risks and specifically has direct oversight of reputation and relationships, political and regulatory uncertainty, capital allocation strategy and project execution and capital costs. The Board reviews the enterprise risk register annually and is informed quarterly on how emerging risks are being managed and mitigated in accordance with TC Energy's

risk appetite and tolerances. The Board also participates in detailed presentations on each enterprise risk identified in the enterprise risk register as required or requested.

We report and monitor material climate policy and related developments through our ERM program to ensure Management, and our Board of Directors, have visibility to the broader perspective, and that mitigation plans are applied in a holistic and consistent manner. If an emerging risk rises to the level of an enterprise risk, the Governance committee will review the mapping of the risk and report it to the Board.

As part of our commitment to continuous improvement of the ERM program, we identified and are working towards adopting KRIs for risk events that may impact our ability to achieve our strategic objectives. These KRIs will provide quantifiable metrics and objective rationales and allow for meaningful trend tracking, for each enterprise risk. Going forward, these KRIs were used to inform the annual in-depth review conducted by the Board.

The enterprise risk register establishes clear accountabilities of the Board, committees, and executives responsible for [specific oversight of each enterprise risk](#). The enterprise risks with the potential to affect our operations are continuously monitored through the program and its framework. In addition, all projects and opportunities recommended by management to the Board for approval include specific descriptions of the associated risks. The risk discussion associated with each project forms a part of the Board's determination of whether to approve projects or pursue opportunities.

The Governance Committee oversees our ERM activities and ensures appropriate Board oversight of our risk management policies, programs, and practices. Other Board committees oversee specific classifications of risk as outlined below:

- The Human Resources Committee oversees executive resourcing, organizational capabilities, and compensation risk to ensure human and labour policies and remuneration practices align with our overall business strategy

- The HSE Committee oversees operational, major project execution, health, safety, sustainability, and environmental risks, including climate-related risks
- The Audit Committee oversees management's role in managing financial risk, including market risk, counterparty credit risk and cybersecurity risk

The ELT is accountable for developing and implementing risk management plans and actions. Effective risk management is reflected in their compensation. Each identified enterprise risk has an ELT member as the governance and execution owner who provides an in-depth review for the Board on an annual basis. Risks, including those associated with climate, are monitored and escalated to MRC through our ERM program to ensure our senior leaders have a broad perspective and make risk-related decisions in a holistic and consistent manner. Our process ensures that the Board is fully informed of the interrelationship between the business environment and its associated risks and is intended to facilitate and stimulate discussion of our key business risks. Risk owners and specialists throughout our company are responsible for continuously managing risks within their respective areas. The two most senior management groups—our ELT and our MRC—are directly responsible for overseeing the management of our most significant operational risks. These teams continuously review the company's activities and provide expertise to inform policy response strategies and ensure consistency.

Our [2023 Annual Report](#) contains information on the risks applicable to TC Energy and is publicly available in the Reports and filings section of the [investors page on our website](#). For more information about the company's processes for identifying and managing risk, please refer to the [risk oversight and enterprise risk management section](#) of the [2024 Management Information Circular](#).

TC ENERGY'S OPERATIONAL MANAGEMENT SYSTEM

Our overarching management system, TOMS, enables operational excellence through an interconnected set of standards, processes and procedures that describes the requirements to manage risk and continually improve



through the plan, do, check, act cycle. These requirements drive our approach to identify, analyze, evaluate, manage, monitor, and communicate risks and implement mitigation strategies for the asset lifecycle, including climate-related risks. Operational risks are communicated annually through the corporate ERM process.

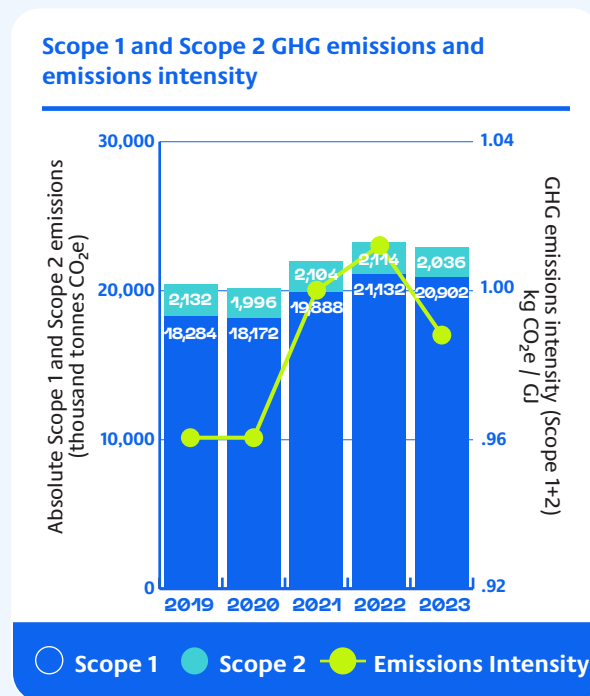
TCFD AND IFRS S2 CLIMATE-RELATED METRICS AND TARGETS

TCFD recommendation and IFRS S2 core content: Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process; disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks. Disclose information relevant to the cross-industry metric categories.

TC Energy tracks year-over-year performance of several metrics to monitor climate-related risks and opportunities. These include Scope 1, Scope 2, and certain Scope 3 categories of GHG emissions as well as Scope 1 (direct) methane emissions, emissions intensity, total energy consumption, environmental compliance and water use. We also disclose on cross-industry metric categories related to capital deployment and executive remuneration tied to climate performance. Looking ahead, TC Energy plans to undergo a deeper scenario analysis to stress test the business portfolio against a 1.5°C scenario. This analysis will help inform our future disclosures around the potential financial impacts of climate-related transition and physical risks, as well as climate-related opportunities.

As illustrated in [our plan to achieve our targets](#) section, almost \$20 billion, or over 60 per cent of our \$31 billion secured capital program, is enabling the energy transition. Additionally, TC Energy's 2024 PSU grant, a midterm incentive plan for eligible executives which vests after a three-year period, includes a 10 per cent weighting for a methane intensity reduction performance metric. For more details on the PSU plan (formerly known as the TC Energy Executive Share Unit Plan), please refer to the [2024 Management Information Circular](#).

Please refer to the [Performance Tables](#) in this report as well as our annual [CDP Climate Change questionnaire response](#) for details.



TCFD recommendation and IFRS S2 core content: Describe the targets used by the organization to manage climate-related risks and opportunities and performance against those targets.

In 2021, we announced two GHG emissions reduction targets to adapt to the energy transition over time, while continuing to provide the energy people need and want. These targets position us to achieve net zero GHG emissions from our operations by 2050, with an interim goal to reduce the GHG emissions intensity of our operations 30 per cent by 2030. Our targets cover 100% of base emissions, Scope 1 and Scope 2, across all three countries where we operate. For planning purposes, progress is measured relative to 2019 as a baseline year, adjusted for material changes in our asset portfolio and quantified on an operational control boundary.

In the body of this report, we discuss the progress we have made in 2023 to advance a cleaner energy future with investments in technology and modernization of our systems and assets.

Our exposure to climate change-related risks and opportunities is managed through our business model, which is based on a long-term, low-risk strategy whereby much of our earnings are underpinned by regulated cost-of-service arrangements and/or long-term contracts. We factor transition and physical climate-related risks into our capital planning, financial risk management and operational activities and are working towards reducing the GHG emissions intensity of our existing operations. We also evaluate the financial resilience of our asset portfolio against a range of future outcomes as part of our strategic planning process. We are exploring technologies, implementing strategies, and considering our GHG emissions reduction targets in our capital allocation framework and decision-making process.

The success of our long-term GHG emission reduction plan depends on our ability to meet society's sustainable energy challenge in a financially prudent manner. Despite our ongoing efforts, persistent market headwinds around the cost impact on our customers to reduce emissions, instituting capital discipline to limit annual spending to \$6-7 billion, and rising energy demand have created significant constraints in achieving our 2030 interim GHG emissions intensity target.

Falling short of our 2030 aspirations is not ideal, as these near-term milestones are important waypoints on the journey to our longer-term goal of positioning to achieve net zero emissions from our operations by 2050. We will provide an update to our GHG targets in 2025.

We continue our efforts to provide a clear, factual and balanced overview of our progress against our targets annually in our Report on Sustainability. In 2023 we also issued reports on the [Reliability of Methane Emissions Disclosure](#) and [Climate-related Lobbying](#) to provide increased transparency and insight into our climate-related goals and efforts.



Task Force on Climate-Related Financial Disclosures summarized alignment

Recognizing the value of sustainability reporting frameworks such as the TCFD, the concordance table shown below demonstrates the relationship between TC Energy's sustainability reporting and Implementing the Recommendations of the [Task Force on Climate-Related Financial Disclosures Final Report \(October 2021\)](#).

TOPIC AND RECOMMENDED CONTENT	TC ENERGY REFERENCE MATERIAL
GOVERNANCE	
Describe the board's oversight of climate-related risks and opportunities.	<p>In this report > Corporate and sustainability governance, Advancing sustainability and innovation, Supply chain, Business ethics and compliance, Enterprise risk management, TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Describe the Board's oversight of climate-related risks and opportunities 2023 Annual Report; Risk oversight and enterprise risk management 2024 Management Information Circular; Risk oversight and enterprise risk management, Sustainability and environmental, social and governance matters Terms of Reference for the CEO Board of Directors Terms of Reference 2023 CDP Climate Change Questionnaire; C1 Governance</p>
Describe management's role in assessing and managing climate-related risks and opportunities.	<p>In this report > Corporate and sustainability governance, Advancing sustainability and innovation, Supply chain, Business ethics and compliance, Enterprise risk management, TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Describe management's role in assessing and managing climate-related risks and opportunities. 2023 Annual Report; Risk oversight and enterprise risk management 2024 Management Information Circular; Risk oversight and enterprise risk management, Sustainability and environmental, social and governance matters 2023 CDP Climate Change Questionnaire; C1 Governance</p>
STRATEGY	
Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	<p>In this report > TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term; Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. 2023 Annual Report; Our strategy, Risk oversight and enterprise risk management 2024 Management Information Circular; Health, safety, sustainability and environment committee 2023 CDP Climate Change Questionnaire; C2 Risks and opportunities</p>
Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	<p>In this report > TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term; Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. 2023 Annual Report; Our strategy, Risk oversight and enterprise risk management, Health, safety, sustainability and environment 2023 CDP Climate Change Questionnaire; C2 Risks and opportunities, C3 Business strategy</p>



TOPIC AND RECOMMENDED CONTENT	TC ENERGY REFERENCE MATERIAL
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Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	In this report > TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. 2023 Annual Report; Our strategy, Risk oversight and enterprise risk management 2023 CDP Climate Change Questionnaire; C2 Risks and opportunities, C3 Business strategy
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RISK MANAGEMENT	
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Describe the organization's processes for identifying and assessing climate-related risks.	In this report > Enterprise risk management , TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Describe the organization's processes for identifying and assessing climate-related risks; describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management. 2023 Annual Report; Risk oversight and enterprise risk management 2024 Management Information Circular; Risk oversight and enterprise risk management, Sustainability and environmental, social and governance matters 2023 CDP Climate Change Questionnaire; C2 Risks and opportunities
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Describe the organization's processes for managing climate-related risks.	In this report > Operational management system , TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Describe the organization's processes for identifying and assessing climate-related risks; describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management. 2023 Annual Report; Risk oversight and enterprise risk management 2024 Management Information Circular; Our competitive advantage, Risk oversight and enterprise risk management 2023 CDP Climate Change Questionnaire; C2 Risks and opportunities
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Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	In this report > Enterprise risk management , TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Describe the organization's processes for identifying and assessing climate-related risks; describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management. 2023 Annual Report; Risk oversight and enterprise risk management 2024 Management Information Circular; Risk oversight and enterprise risk management, Sustainability and environmental, social and governance matters 2023 CDP Climate Change Questionnaire; C2 Risks and opportunities
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METRICS AND TARGETS	
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Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	In this report > GHG emissions: Scope 1 (equity share , operational control), GHG emissions: Scope 2 , GHG emissions: Scope 3 , GHG emissions intensities , TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process; disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks. and Describe the targets used by the organization to manage climate-related risks and opportunities and performance against those targets. GHG Emissions Reduction Plan 2023 Annual Report; Our strategy, Risk oversight and enterprise risk management 2024 Management Information Circular; Risk oversight and enterprise risk management, Sustainability and environmental, social and governance matters 2023 CDP Climate Change Questionnaire; C4 Targets and performance
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TOPIC AND RECOMMENDED CONTENT	TC ENERGY REFERENCE MATERIAL
<p>Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.</p>	<p>In this report > GHG emissions: Scope 1 (equity share, operational control), GHG emissions: Scope 2, GHG emissions: Scope 3, GHG emissions intensities, TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process; disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks. 2023 CDP Climate Change Questionnaire; C6 Emissions data, C7 Emissions breakdown</p>
<p>Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</p>	<p>In this report > Climate change and the energy transition, TCFD & IFRS S2 climate-related disclosures comprehensive alignment > Describe the targets used by the organization to manage climate-related risks and opportunities and performance against those targets. GHG Emissions Reduction Plan 2023 Annual Report; Our strategy, Risk oversight and enterprise risk management 2024 Management Information Circular; Risk oversight and enterprise risk management, Sustainability and environmental, social and governance matters 2023 CDP Climate Change Questionnaire; C4 Targets and performance</p>

Following the publication of IFRS S1 and IFRS S2, and at the Financial Stability Board’s request, the TCFD is now subsumed into the International Sustainability Standards Board (ISSB) with the standard-setter taking over the monitoring of the progress on companies’ climate-related disclosures from 2024. Please see our [IFRS S2 summarized alignment](#) for preliminary correlations between TC Energy’s sustainability reporting and the IFRS S2 *Climate-related Disclosures*



United Nations Sustainable Development Goals alignment

We support the United Nations Sustainable Development Goals (UN SDGs) and have identified the SDGs that are most relevant to our business and where we can make our greatest contributions. These global goals serve as a framework to orient our sustainability commitments, targets and progress. We consider it essential to cooperate with other organizations and to align our efforts behind UN SDG 17.

COMMITMENT	UN SDG
ENVIRONMENT	
Embracing the energy transition	UN SDG 7 – Affordable and Clean Energy UN SDG 12 – Responsible Consumption and Production UN SDG 13 – Climate Action UN SDG 17 – Partnerships for the Goals
Leaving the environment as we found it	UN SDG 6 – Clean Water and Sanitation UN SDG 14 – Life Below Water UN SDG 15 – Life on Land
Committed to safe, reliable, sustainable operations	UN SDG 9 – Industry, Innovation and Infrastructure UN SDG 12 – Responsible Consumption and Production UN SDG 14 – Life Below Water UN SDG 15 – Life on Land
SOCIAL	
Continuous safety improvement	UN SDG 3 – Good Health and Wellbeing UN SDG 8 – Decent Work and Economic Growth
Focus on mental health	UN SDG 3 – Good Health and Wellbeing UN SDG 4 – Quality Education UN SDG 8 – Decent Work and Economic Growth
Fostering mutually beneficial relationships	UN SDG 4 – Quality Education UN SDG 8 – Decent Work and Economic Growth UN SDG 11 – Sustainable Cities and Communities UN SDG 17 – Partnerships for the Goals
Fostering enduring, mutually beneficial relationships with Indigenous groups	UN SDG 1 – No Poverty UN SDG 3 – Good Health and Well-being UN SDG 8 – Decent Work and Economic Growth UN SDG 10 – Reduced Inequalities UN SDG 16 – Peace, Justice and Strong Institutions
Furthering inclusion and diversity	UN SDG 5 – Gender Equality UN SDG 8 – Decent Work and Economic Growth UN SDG 10 – Reduced Inequalities
GOVERNANCE	
Further integrate and contribute to sustainability	UN SDG 13 – Climate Action UN SDG 16 – Peace, Justice and Strong Institutions UN SDG 17 – Partnerships for the Goals



Stakeholder Engagement - related policies, guiding principles and documents

Meaningful and continuous engagement with our rightsholders and stakeholders is critical. At TC Energy, this engagement extends beyond direct conversation - it is embedded within our policies, guiding principles, and public-facing documents. These indirect engagement methods demonstrate TC Energy's commitment to consistent, meaningful stakeholder engagement.

RELATED POLICIES, GUIDING PRINCIPLES AND/OR DOCUMENTS

EMPLOYEES AND CONTRACTORS	<ul style="list-style-type: none"> • Commitment Statement • Equal Employment Opportunity and Non-Discrimination Policy • Harassment-free Workplace Policies: Canada, U.S., Mexico • Reasonable Workplace Accommodation Policy 	<ul style="list-style-type: none"> • Protection of Personal Information Policy • Code of Business Ethics (COBE) Policy • Avoiding Bribery and Corruption Policy • Political Contributions and Activity Policy 	<ul style="list-style-type: none"> • Oversight and policies on lobbying, political contributions and corporate memberships • Cybersecurity Policy • Operational Management System • Our Vision for North American Energy
CUSTOMERS AND SUPPLIERS	<ul style="list-style-type: none"> • Commitment Statement • Supplier Diversity and Local Participation Business Policy • Contractor Code of Business Ethics (COBE) Policy • Vendor Safety Handbook • Avoiding Bribery and Corruption Policy 	<ul style="list-style-type: none"> • Contractor, Supplier and Vendor Rules and Guidelines • Supplier Diversity and Local Participation Requirements; Canada and U.S. • Contractor Alcohol and Drug Guideline • Protection of Personal Information Policy • Our Vision for North American Energy 	<ul style="list-style-type: none"> • Occupational Health and Safety Standards for Prime/General Contractors (CAN-US) • Cybersecurity Policy • Customer Central • Operational Management System
INVESTORS	<ul style="list-style-type: none"> • Annual Report • Quarterly Reports • News releases • Corporate Profile • Our Vision for North American Energy 	<ul style="list-style-type: none"> • Investor Day Presentation • Management Information Circular • Annual Information Form • Enterprise Risk Management Policy • Code of Business Ethics (COBE) Policy 	<ul style="list-style-type: none"> • Corporate Governance Guidelines • ESG Investor Pack • 2023 Sustainable Energy Forum
LANDOWNERS AND LOCAL COMMUNITIES	<ul style="list-style-type: none"> • Commitment Statement • Working with landowners • Protection of Personal Information Policy 	<ul style="list-style-type: none"> • Work safely guidelines • Code of Business Ethics (COBE) Policy 	<ul style="list-style-type: none"> • Safe Digging Resources • Our Vision for North American Energy
INDUSTRY GROUPS, GOVERNMENT AND REGULATORS	<ul style="list-style-type: none"> • Commitment Statement • Code of Business Ethics (COBE) Policy • Avoiding Bribery and Corruption Policy 	<ul style="list-style-type: none"> • Report on Climate-related Lobbying • Political Contributions and Activity Policy 	<ul style="list-style-type: none"> • Oversight and policies on lobbying, political contributions and corporate memberships • Our Vision for North American Energy
INDIGENOUS GROUPS	<ul style="list-style-type: none"> • Commitment Statement • Indigenous Relations Policy • Indigenous guiding principles • Indigenous Relations strategy 	<ul style="list-style-type: none"> • Canadian Indigenous Equity Framework • Supplier Diversity and Local Participation Business Policy • Supplier Diversity and Local Participation Requirements; Canada and U.S. • Contractor Code of Business Ethics (COBE) Policy 	<ul style="list-style-type: none"> • Equal Employment Opportunity and Non-Discrimination Policy • Reconciliation Action Plan • Reconciliation Action Plan Update



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 Report.

Our forward-looking information in this document includes, but is not limited to statements on our financial and operational performance, including the performance of our subsidiaries, expectations about the new Liquids Pipelines Company, South Bow Corporation, following the anticipated completion of the proposed spinoff transaction of our Liquids Pipeline business (the spinoff Transaction) into a separately listed company, including the management and credit ratings thereof, expectations regarding the size, structure, timing, conditions and outcome of ongoing and future transactions, including the spinoff Transaction and our asset divestiture program, expectations about strategies and goals for growth and expansion including those growth opportunities anticipated from energy transition, our anticipated capital program, our expected emission reductions and other benefits from planned projects, our ability to leverage carbon offsets and credits, expected costs and schedules for planned projects and restoration/remediation initiatives, the installation, adoption and integration of new technologies into our business, including, centralized data management systems, AI and machine learning technologies, hydrogen hubs, vapour combustors and hybrid gas, electric compressor units, drone use advances, and methane recapture technologies, expected energy demand levels, anticipated impacts from our community giving programs, future-orientated financial information or financial outlook, statements regarding our future plans and prospects overall, including those statements relating to energy transition, and statements relating to

TC Energy’s sustainability commitments, including embracing energy transition, statements related to our GHG emissions reduction goals, targets related to GHG emissions intensity and absolute reduction, biodiversity and land impacts, safety and continuous improvement, enhancing mental health and psychological safety, fostering relationships with Indigenous groups and external stakeholders, maintaining mutually beneficial partnerships with our landowners, furthering inclusion and diversity across our organization and supply chain and further integration of sustainability into strategy, decision-making, performance-tracking and assessment, R&D and innovation investments to contribute to sustainability, among other things.

Our forward-looking information is based on certain key assumptions and is subject to risks and uncertainties, including but not limited to 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 emissions targets and ambitions, the commercial viability and scalability of GHG emissions reduction strategies and related technology and products, the development and execution of implementing strategies to meet our sustainability commitments and GHG emissions targets and ambitions, our ability to implement a capital allocation strategy, portfolio management and divestiture programs aligned with maximizing shareholder value, realization of expected benefits from acquisitions, divestitures, the spinoff Transaction and energy transition, terms, timing and completion of the spinoff Transaction, including the timely receipt of all necessary approvals, that the market or other conditions are no longer favourable to completing the spinoff Transaction, business disruption during the period prior to or directly following the spinoff Transaction, 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 environmental, social and governance (ESG) matters, competition in the businesses in which we operate, unexpected or unusual weather, acts of civil disobedience, cybersecurity and technological developments, ESG related risks, 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.

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