ESG DATA SHEET

A Task Force on Climate-Related Financial Disclosures and Sustainability Accounting Standards Board Report

TC Energy

Progress that matters

to people and our planet



TC Energy

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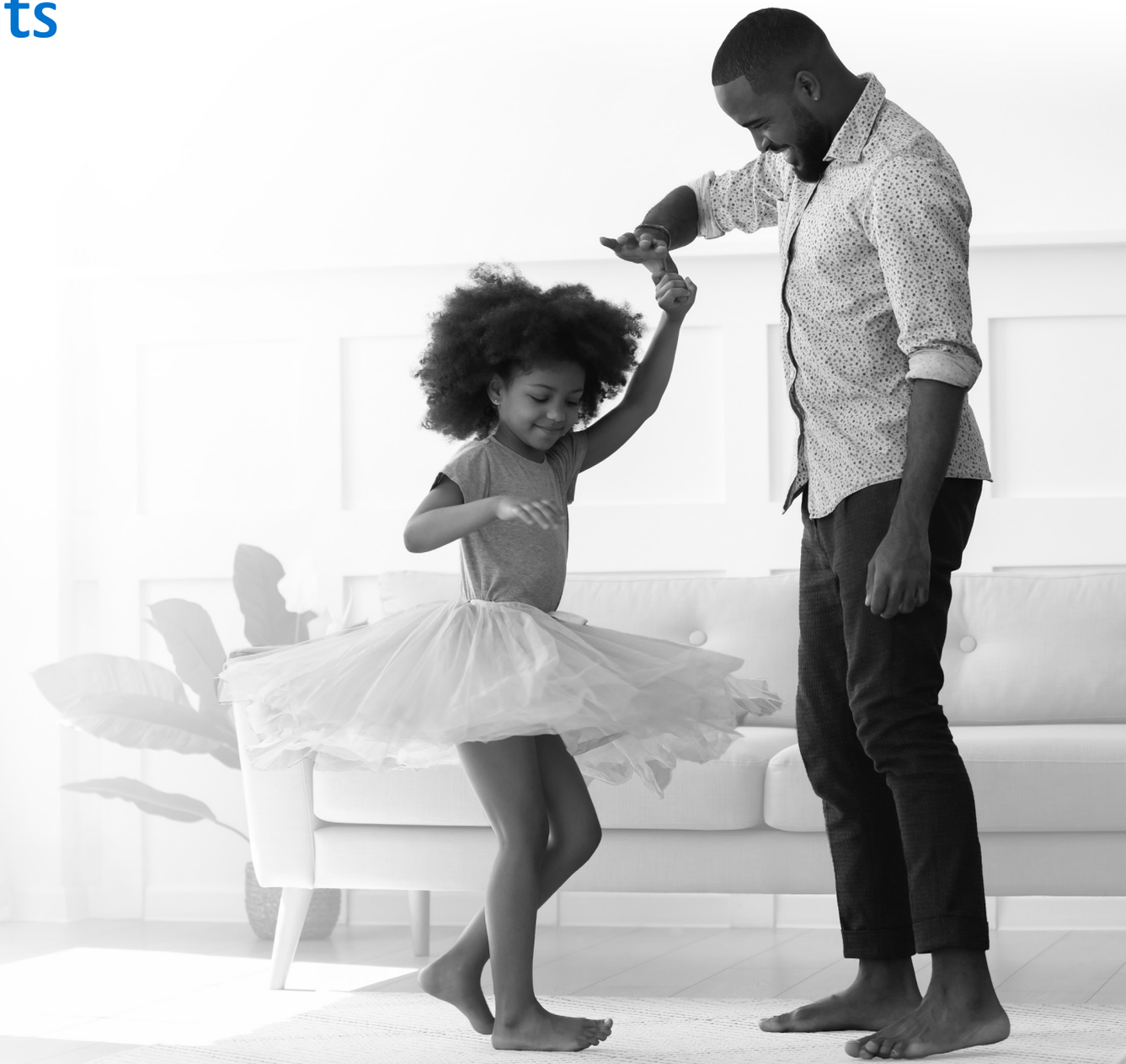
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ESG Performance Data

Our goal is to best meet the information needs of our stakeholders by providing clear and useful Environment, Social and Governance (ESG) data.

Recognizing the value of ESG reporting frameworks such as the Task Force on Climate-Related Financial Disclosure (TCFD), Sustainability Accounting Standards Board (SASB), United Nations Sustainable Development Goals (UN SDGs) and Global Reporting Standard (GRI), this data sheet demonstrates alignment to TCFD, SASB and UN SDG standards, and complements the content in our 2020 Report on Sustainability. Where non-standard measures are required, we have disclosed in alignment with internal standards.

Unless otherwise noted, ESG data reported here covers January 1 to December 31, 2019 for all TC Energy assets. Unless otherwise noted, all amounts are in Canadian dollars and all data reflect 2019 numbers. A dash (-) indicates that a metric was not reported in the associated year. Totals may not add up due to rounding. Scope and boundary information for prior years can be found in previous years' data sheets. Footnotes provide additional information on 2019 data boundaries, definitions and methodology where applicable.

Our purpose

Delivering the energy people need, every day. Safely. Responsibly. Collaboratively. With integrity.

Our vision

To be the leading energy infrastructure company in North America, focusing on pipeline and power generation opportunities where we have, or can develop, a significant competitive advantage.



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Our sustainability commitments

To further integrate sustainability into our management decision-making and performance tracking and assessment

To enhance energy sector sustainability through research and development (R&D) and innovation investments

To strengthen local community, Indigenous group and employee resilience, including in recovery and moving forward from the COVID-19 pandemic

To contribute to global efforts to reduce climate change

To leave the environment where we work in a condition equal to, or better than, we found it; including biodiversity and land capability

To achieve our "zero is real" safety commitment

To demonstrate in words and actions the dual importance of physical and psychological safety

To embed a culture of inclusion across our organization and ensure the diversity of employees reflects the communities in which we live and work

To maintain mutually beneficial partnerships with our landowners

To lead in reconciliation and be a partner of choice for Indigenous groups

UN Sustainable Development Goals

TC Energy supports the SDGs, which are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. By living up to our 10 commitments, we contribute directly or indirectly to the 17 SDGs. Throughout this report, we've identified where we make our greatest contributions.



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Responses align to the TCFD recommendations

Describe the board's oversight of climate-related risks and opportunities.

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Board of Directors' HSSE Committee

The Health, Safety and Environment committee was recently renamed the Health, Safety, Sustainability and Environment (HSSE) committee, to reflect Board oversight of climate change-related risk and environmental and social issues, as well as to demonstrate TC Energy's commitment to sustainability.

The HSSE committee met at three regularly scheduled meetings in February, May and December 2019. Generally, each year the HSSE committee or its Chair tours one of our existing assets or projects under development as part of its responsibility to monitor and review our health, safety, sustainability and environmental practices. Additionally, the Board and the HSSE Committee have a joint site visit annually.

The HSSE committee reviews and monitors 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 monitors the performance of actions and initiatives undertaken by TC Energy to prevent, mitigate and manage risks related to HSSE matters, including climate change-related risks and any critical incidents respecting our assets, operations, personnel and public safety. The risk focus of the HSSE committee is operational risk, people and process, safety, sustainability, security and environmental risk.

In addition to its existing activities, the HSSE committee also reviews reports on climate change-related laws and regulations and their potential impact on TC Energy, reviews reports on climate-related risks and opportunities (physical, technological, regulatory and social), receives information on stakeholder engagement on sustainability issues, oversees management's approach to voluntary reporting on sustainability matters, and reports and updates on initiatives with operations, research and development, and projects that support sustainability.

Board of Directors' Governance Committee

Our Board of Directors' Governance Committee oversees our Enterprise Risk Management (ERM) activities, which includes ensuring appropriate management systems are in place to identify and manage our risks and ensuring adequate Board oversight of our risk management policies, programs and practices. The committee oversees the ERM framework and process and meets with management annually to ensure there is proper Board and committee oversight according to the terms of their charters. The committee also 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.

The Board provides oversight and direction in the strategic planning process to ensure we have a robust strategy that supports our vision of being North America's leading energy infrastructure company and purpose of safely and reliably delivering the energy people need, every day.

To achieve this, we have a five-year strategic plan which we update and extend annually and hold strategic issues sessions with the Board throughout the year to consider specific and emerging issues. The Governance committee has accountability for overseeing the strategy development process and works with management to identify and discuss emerging issues, elevating topics for discussion with the entire Board as necessary. Guidance is also provided relative to the annual strategy cycle.

Board of Directors

We update our five-year strategic plan annually, which is presented to the Board for review, discussion and approval. As part of this, management includes an assessment of energy fundamentals, the competitive environment and the stakeholder landscape to identify opportunities and threats to our business strategy.

We also test our strategy against a range of energy supply and demand futures to establish our resilience. This session informs our annual strategic priorities and performance measures. Throughout the year, the Board monitors management's progress toward achieving strategic goals. At each regularly scheduled Board meeting, management provides updates on the human, technological and capital resources required to implement our strategy and relevant regulatory, environmental, social and governance (ESG) issues that may impact our strategy.

TC Energy's Board of Directors Terms of Reference can be found at can be found here.

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Describe management's role in assessing and managing climate-related risks and opportunities.

SDG: 12 13

The CEO and Executive Leadership Team develop and implement TC Energy's strategy, and the Chief Risk Officer (CRO) is responsible for our ERM Framework. The Chief Sustainability Officer (CSO) is responsible for directing the coordination, communication and management of sustainability-related issues for TC Energy, particularly the intersection of risk, governance, environmental and social issues.

The CSO reports to the HSSE Committee of the Board on sustainability matters, as well as to the CEO and Executive Leadership Team. The HSSE Management Committee recommends strategic priorities relating to HSSE matters to the CSO, monitors HSSE developments and shapes communication strategy on HSSE matters. The committee is co-chaired by the CSO and is comprised of management representatives from various departments.



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Check out the Risk Management section where we outline risks by topic

Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

SDG: 7 12 13

TC Energy's time horizons are aligned with TC Energy's Operational Management System (TOMS) Risk Standard and our Enterprise Risk Management (ERM) framework.

Short-term (1-2 years)

We own assets and have business interests in a number of regions subject to greenhouse gas (GHG) emissions regulations, including GHG emissions management and carbon pricing policies. In 2019, we incurred $69 million (2018 – $62 million) of expenses under existing carbon pricing programs. Across North America there are a variety of new and evolving initiatives in development at the federal, regional, state and provincial level aimed at reducing GHG emissions. We actively monitor and submit comments to regulators as these new and evolving initiatives are undertaken. We support transparent climate change policies that promote sustainable and economically responsible natural resource development. Beyond the short-term, we expect that, over time, most of our assets will be subject to some form of regulation to manage GHG emissions. Changes in regulations may result in higher operating costs or other expenses, or higher capital expenditures to comply with possible new regulations.

Medium-term (3-10 years)

We recognize the future energy system will evolve. As part of this, management includes an assessment of energy fundamentals, the competitive environment and the stakeholder landscape to identify opportunities and threats to our business strategy. This session informs our annual strategic priorities and performance measures, and provides the opportunity to review our risk preferences, as described in our 2019 Annual Report (p.13):

- Live within our means.
- Project risks known and acceptable.
- Business underpinned by strong fundamentals.
- Manage credit metrics to ensure "top-end" sector ratings.
- Prudent management of counterparty exposure.

Long-term (11-20 years)

At TC Energy, we look at long-term energy scenarios pertaining to how the energy transition may unfold from multiple organizations. We monitor trends specific to energy supply and demand fundamentals, broader energy trends, in addition to analyzing how our portfolio will perform under one or more outlooks. Looking forward we will continue to use scenario analysis in our strategic planning cycle to enhance the rigour of our assessment of our long-term resilience.

Our three major lines of business provide 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. Long-life infrastructure assets covering strategic North American corridors and supported by long-term commercial arrangements are the cornerstones of our low-risk business model.

Our pipeline assets include large-scale natural gas and liquids pipelines and associated storage facilities that connect low cost supply basins with stable and growing North American and export markets, generating predictable and sustainable cash flows and earnings.

Our power and non-regulated storage assets are primarily under long-term contracts that provide stable cash flows and earnings.

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Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.

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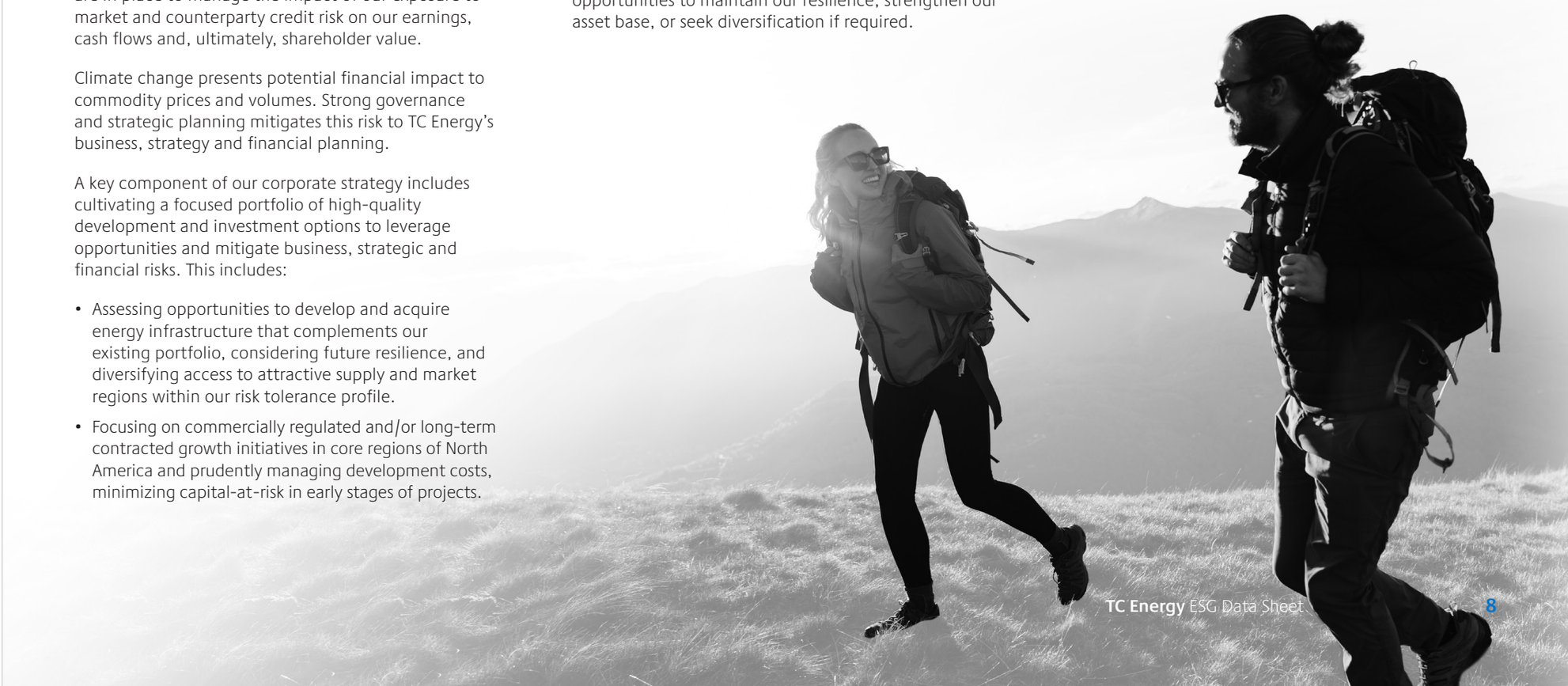
Business interruption related to operational risks (including those related to climate change) could result in increased operating cost. We must also offer energy infrastructure services and forms of energy in supply and demand areas that are attractive to customers. Should alternative lower-carbon forms of energy result in decreased demand for our current services, the value of our long-lived energy infrastructure assets could be negatively impacted. Strategies, policies and limits are in place to manage the impact of our exposure to market and counterparty credit risk on our earnings, cash flows and, ultimately, shareholder value.

Climate change presents potential financial impact to commodity prices and volumes. Strong governance and strategic planning mitigates this risk to TC Energy's business, strategy and financial planning.

A key component of our corporate strategy includes cultivating a focused portfolio of high-quality development and investment options to leverage opportunities and mitigate business, strategic and financial risks. This includes:

- Assessing opportunities to develop and acquire energy infrastructure that complements our existing portfolio, considering future resilience, and diversifying access to attractive supply and market regions within our risk tolerance profile.
- Focusing on commercially regulated and/or long-term contracted growth initiatives in core regions of North America and prudently managing development costs, minimizing capital-at-risk in early stages of projects.
- Advancing on selected opportunities to full development and construction when market conditions are appropriate and project risks and returns are acceptable.
- Monitoring trends specific to energy supply and demand fundamentals, in addition to analyzing how our portfolio performs under different energy scenarios.

These results contribute to the identification of opportunities to maintain our resilience, strengthen our asset base, or seek diversification if required.



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Climate change presents a potential financial impact to commodity prices and volumes. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

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TC Energy operates under a low-risk and enduring business model that maximizes the full-life value of our long-life assets and commercial positions through all points in the business cycle. While renewables are the fastest-growing form of new power generation, respected authorities including the IEA forecast oil and natural gas will continue to be dominant energy sources and a vital part of the energy mix for decades to come. Our investment in balanced and sustainable energy systems, our current asset portfolio and our future growth plans all reflect the long-term supply and demand forecasts for all forms of energy.

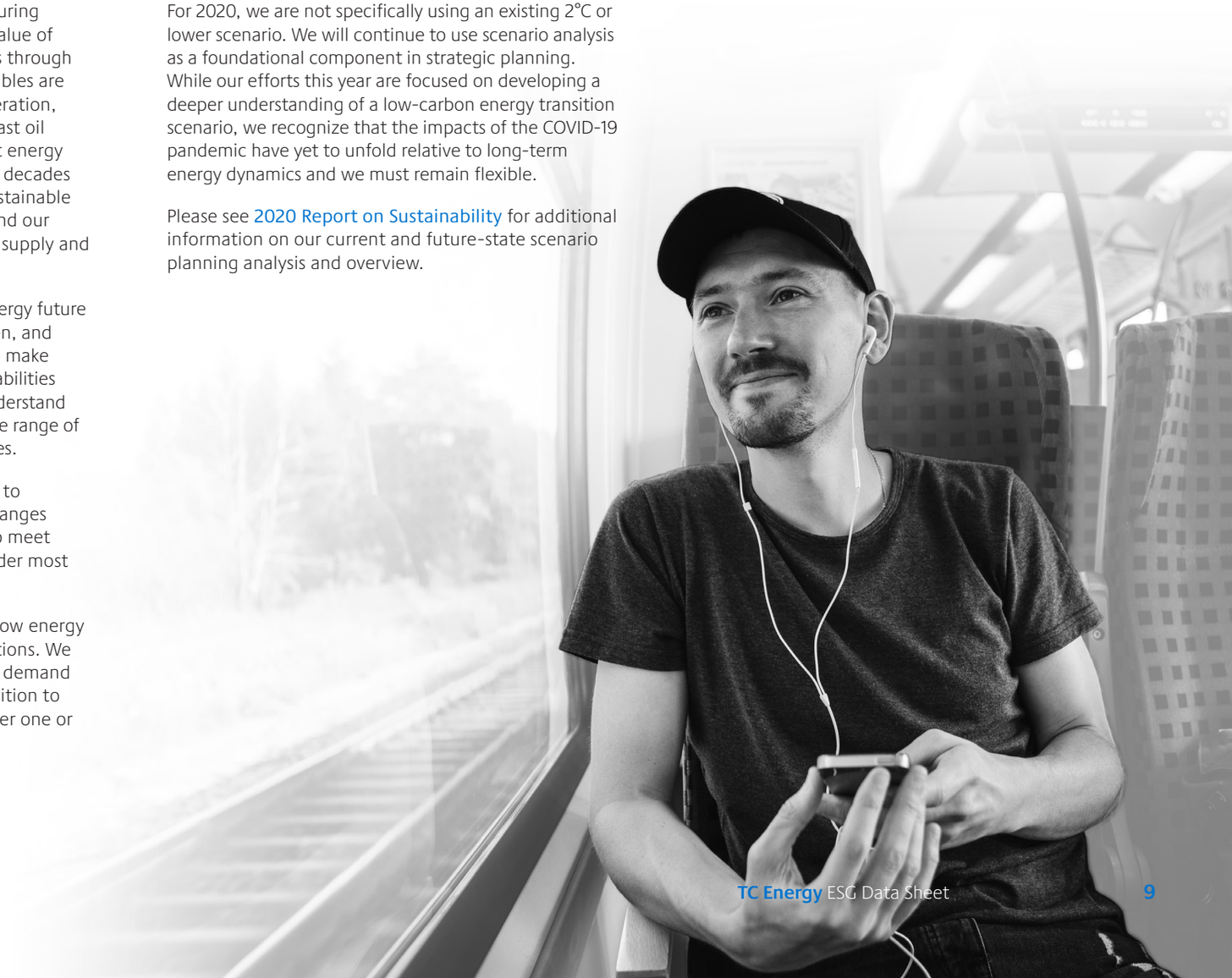
Scenarios offer alternative outlooks for the energy future but do not describe what will or should happen, and therefore investors should not rely on them to make investment decisions. We did not assign probabilities to the scenarios. Our objective is to better understand the resilience of our asset portfolio over a large range of potential energy supply and demand outcomes.

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 effective under most situations and conditions.

We look at multiple scenarios pertaining to how energy transition will unfold from multiple organizations. We monitor trends specific to energy supply and demand fundamentals, broader energy trends, in addition to analyzing how our portfolio will perform under one or more outlooks.

For 2020, we are not specifically using an existing 2°C or lower scenario. We will continue to use scenario analysis as a foundational component in strategic planning. While our efforts this year are focused on developing a deeper understanding of a low-carbon energy transition scenario, we recognize that the impacts of the COVID-19 pandemic have yet to unfold relative to long-term energy dynamics and we must remain flexible.

Please see 2020 Report on Sustainability for additional information on our current and future-state scenario planning analysis and overview.



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Describe the organization's processes for identifying and assessing climate-related risks.

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The following section is intended to provide information on TC Energy's identification and assessment of climate-related risks, and the risks described below may include risks that are not material from a securities law perspective, but relevant from a sustainability perspective. For disclosure on risks that are material to TC Energy from a securities law perspective, please refer to the most recent Quarterly Report to Shareholders and Annual Report filed under TC Energy's profile on SEDAR at www.sedar.com and with the U.S. Securities and Exchange Commission at www.sec.gov.

The risks associated with climate policy are monitored and escalated to senior management through TC Energy's ERM process to ensure leadership has visibility on the broader perspective, and that treatments are applied in a holistic and consistent manner.

The Board of Directors Governance Committee oversees our enterprise risk management activities, which includes ensuring appropriate management systems are in place to identify and manage our risk, ensuring adequate Board oversight of our risk management policies, programs and practices.

Currently, climate policy or transition risk is covered under our "capital allocation strategy" risk category, whereas physical climate risks are covered under our risk category of "significant rupture or operational failure resulting in extensive and prolonged interruptions to operations".

Climate change is an issue that impacts the majority of our enterprise risks, specifically those associated with political and regulatory, reputation and relationships, access to capital at competitive cost and capital allocation strategy risks.



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Describe the organization's processes for managing climate-related risks.

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Emerging Regulation risk

Across North America there are a variety of new and evolving initiatives in development at the federal, regional, state and provincial level aimed at reducing GHG emissions. We actively monitor and submit comments to regulators as these new and evolving initiatives are undertaken. We support transparent climate change policies that promote sustainable and economically responsible natural resource development. We expect that, over time, most of our assets will be subject to some form of regulation to manage GHG emissions. Changes in regulations may result in higher operating costs or other expenses, or higher capital expenditures to comply with possible new regulations.

Legal risk

TC Energy manages existing Canadian and Mexican legal requirements through its corporate Legal Registry, including those related to GHG emissions, carbon taxes and other climate-related legislation. Legal requirements for the U.S., including those related to GHG emissions, carbon taxes and other climate-related legislation, are managed by relevant departments.

Technology risk

Should alternative lower-carbon forms of energy result in decreased demand for our current services, the value of some of our long-lived energy infrastructure assets could be negatively impacted. We are cognizant of such consequences and monitor the development of innovative technologies that have longer-term implications for our strategy.

Market risk

We view commodity price and volume risk being the primary market risk related to climate change. We are exposed to market risk and counterparty credit risk and have strategies, policies and limits in place to manage the impact of these risks on our earnings, cash flows and, ultimately, shareholder value.

Risk management strategies, policies and limits are designed to ensure our risks and related exposures are in line with our business objectives and risk tolerance. Market risk and counterparty credit risk are managed within limits that are established by our Board of Directors, implemented by senior management and monitored by our risk management and internal audit groups. Our Board of Directors' Audit Committee oversees how management monitors compliance with market risk and counterparty credit risk management policies and procedures and oversees management's review of the adequacy of the risk management framework.

We construct and invest in energy infrastructure projects, purchase and sell commodities, issue short-term and long-term debt, including amounts in foreign currencies, and invest in foreign operations. Some of these activities expose us to market risk from changes in commodity prices, foreign exchange rates and interest rates, which may affect our earnings and the value of the financial instruments we hold. We assess contracts used to manage market risk to determine whether all, or a portion, meet the definition of a derivative.

Commodity price risk

The following strategies may be used to manage exposure to commodity price risk in our non-regulated businesses:

- In our power generation business, we manage our exposure to fluctuating commodity prices through long-term contracts and hedging activities including selling and purchasing power and natural gas in forward markets.
- In our non-regulated natural gas storage business, our exposure to seasonal natural gas price spreads is managed with a portfolio of third-party storage capacity contracts and through offsetting purchases and sales of natural gas in forward markets to lock in future positive margins.
- In our liquids marketing business, we enter into pipeline and storage terminal capacity contracts, as well as crude oil purchase and sale agreements. We fix a portion of our exposure on these contracts by entering into financial instruments to manage our variable price fluctuations that arise from physical liquids transactions.

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Describe the organization's processes for managing climate-related risks.

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Reputational risk

Our operations and growth prospects require us to have strong relationships with key stakeholders including Indigenous communities, landowners, governments and government agencies and environmental non-governmental organizations. Inadequately managing expectations and issues important to stakeholders, including those related to climate change, could affect our reputation and our ability to operate and grow, as well as our access to and cost of capital.

Constructing and operating our pipelines to ensure transportation services are provided safely and reliably is essential to the success of our business. Interruptions in our pipeline operations impacting our throughput capacity may result in reduced revenues and can affect corporate reputation as well as customer and public confidence in our operations. We manage this by investing in a highly skilled workforce, hiring third-party inspectors during construction, operating prudently, monitoring our pipeline systems continuously, using risk-based preventive maintenance programs and making effective capital investments. We use pipeline inspection equipment to regularly check the integrity of our pipelines, and repair or replace sections when necessary. We also calibrate meters regularly to ensure accuracy and employ robust reliability and integrity programs to maintain compression equipment and ensure safe and reliable operations.

Acute physical risk

Significant changes in temperature and weather, including the potential impacts of climate change, have many effects on our business, ranging from the impact on demand, availability and commodity prices, to efficiency and output capability. Extreme temperature and weather can affect market demand for power and natural gas and can lead to significant price volatility. Extreme weather can also restrict the availability of natural gas and power if demand is higher than supply. Seasonal changes in temperature can reduce the efficiency and production of our natural gas-fired power plants.

Physical risks may result in decreased revenues and increased operating costs, legal proceedings, regulatory actions or other expenses all of which could reduce our earnings. Losses not recoverable through tolls or contracts or covered by insurance could have an adverse effect on operations, cash flow and financial position. Certain events could lead to the risk of injury and environmental damage.

The safety of our employees, contractors and the public, as well as the integrity of our pipeline and power and storage infrastructure, is a top priority. All assets are designed, constructed and commissioned with full consideration given to safety and integrity, and are placed in service only after all necessary requirements have been satisfied.

TC Energy's Crisis Management Program (CMP) is a strategic system that sets out a framework and a management structure to effectively manage a crisis event which has the potential to greatly affect the operations and credibility of a company, which includes adverse weather conditions. Crisis management includes anticipating, preventing, preparing for and responding to a crisis which falls outside the normal company management structure. The CMP is designed to complement the normal operations of TC Energy, its operational business units, and the current Emergency Response Plans (ERP) and does not supersede normal operating procedures unless and until a crisis occurs.

Chronic physical risk

All relevant chronic physical risk considerations are included in our response to acute physical risks as highlighted in that section. Additional to the monitoring and mitigation highlighted in the acute physical risk assessment, we have incident, emergency and crisis management systems to ensure an effective response to minimize further loss or injuries and to enhance our ability to resume operations. We also have a Business Continuity Program that determines critical business processes and develops resumption plans.

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Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

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Our ERM and Risk Management teams continuously refine the company's activities that may influence climate policy. This group provides input from their experience and expertise to inform policy response strategies and ensure consistency. The team includes members of corporate groups, such as Environment, various stakeholder relations teams, Legal, Regulatory services, and representatives from business segments.

Risks associated with climate policy are monitored and escalated to senior management through TC Energy's ERM process to ensure leadership has visibility on the broader perspective, and that treatments are applied in a holistic and consistent manner.

As a risk that is fundamental to our business, the Management Risk Committee manages climate-related risk through each of the distinct enterprise risks listed in our proxy to ensure transition plans align with the other actions being planned and executed on each risk.

For example, our CSO is the governance owner of Enterprise Risk related to "political and regulatory" and "reputation and relationship" risks. As owner he is accountable for the company's mitigation of these risks, as well as for the reporting of risk ratings and mitigation plans to our Board of Directors, including a deep dive presentation on these risks in Q1 2020 which included a discussion on climate risks to each business unit.



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As per TCFD, this section discloses the metrics used to assess and manage relevant climate-related risks and opportunities where such information is material.

Additional metrics are also provided and aligned to SASB and GRI as appropriate.



Greenhouse Gas Emissions

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Scope 1 GHG Emissions [1, 2]					
SASB EM-MD-110a.1	**Total Scope 1 GHG emissions [1, 2] (tonnes CO_2e)**	**13,000,000**	**16,118,000**	**12,500,000**	**13,748,730**	**14,427,861**
	By line of business					
SASB EM-MD-110a.1	Natural Gas Pipelines [2]	7,300,000	8,300,000	8,700,000	10,698,553	11,765,765
SASB EM-MD-110a.1	Liquids Pipelines [3]	-	-	-	1,490	699
SASB EM-MD-110a.1	Power and Storage [2, 4]	5,700,000	7,800,000	3,800,000	3,014,752	2,626,956
SASB EM-MD-110a.1	Corporate [5]	-	18,000	62,400	33,935	34,441
	By activity [6]					
SASB EM-MD-110a.1	Combustion	-	-	-	12,284,694	12,682,066
SASB EM-MD-110a.1	Flared hydrocarbons	-	-	-	11,588	24,387
SASB EM-MD-110a.1	Directly vented releases	-	-	-	969,167	1,173,614
SASB EM-MD-110a.1	Fugitive emissions/leaks	-	-	-	449,241	513,335
	Other indicators					
SASB EM-MD-110a.1	Methane portion of Scope 1 emissions (tonnes CH_4)	-	-	-	58,670	70,569
SASB EM-MD-110a.1	Portion of Scope 1 emissions covered by reduction regulations (%) [7]	-	-	-	72%	66%

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Scope 2 GHG Emissions [2, 9]					
GRI 305-2	**Total Scope 2 GHG emissions [2] (tCO_2e)**	**190,000**	**350,000**	**343,700**	**2,343,135**	**2,010,031**
GRI 305-2	Natural Gas Pipelines [2]	190,000	350,000	335,000	429,595	320,457
GRI 305-2	Liquids Pipelines	-	-	-	1,873,516	1,659,584
GRI 305-2	Power and Storage [2]	4,000	7,000	8,700	40,025	29,990
	Scope 1 and Scope 2 GHG Emissions [1, 2]					
GRI 305-2	**Total Scope 1 and Scope 2 GHG emissions [2] (tCO_2e)**	**13,300,000**	**16,500,000**	**12,843,700**	**16,091,865**	**16,437,892**
GRI 305-2	Natural Gas Pipelines [2]	7,500,000	8,700,000	9,035,000	11,128,147	12,086,222
GRI 305-2	Liquids Pipelines	-	-	-	1,875,006	1,660,283
GRI 305-2	Power and Storage [2]	5,700,000	7,800,000	3,808,700	3,054,776	2,656,946

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Scope 1 and Scope 2 GHG Emission Intensity [9]					
G4-EN18	**Natural Gas Pipelines (tonnes CO_2e / Throughput Bcf)**	560	-	-	-	-
G4-EN18	United States of America [2]	-	293	280	291	211
G4-EN18	Canada [2]	-	991	779	895	983
G4-EN18	Mexico [2]	-	136	145	211	179
G4-EN18	**Power [2, 10] (tonnes CO_2e / Net Generation MWh)**	0.15	0.19	0.12	0.10	0.10
G4-EN18	**Storage (tonnes CO_2e /Total Volume [Injected + Withdrawn] Bcf)**	-	-	-	858	768
	Scope 3 GHG Emissions [11]					
G4-EN17	**Total Scope 3 GHG emissions (tonnes CO_2e)**	**-**	**-**	**-**	**3,026,175**	**3,069,089**
G4-EN17	Category 3: Fuel and Energy Related Activities (not included in Scope 1 & Scope 2)	-	-	-	2,984,936	3,033,538
G4-EN17	Category 6: Business Travel	-	-	-	10,532	11,235
G4-EN17	Category 8: Upstream Leased Assets	-	-	-	30,706	24,314

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Air Quality

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Air Quality - Canada [12]					
SASB -EM-MD-120a.2, GRI 305-7	**Nitrogen Oxide (NOx) (metric tonnes)** [2]	12,231.23	13,220.63	12,889.34	14,247.43	14,858.01
SASB-EM-MD-120a.1, GRI 305-7	**Sulfur Dioxide (SO_2) emissions (metric tonnes)**	-	-	-	-	-
SASB-EM-MD-120a.1, GRI 305-7	**Volatile Organic Compounds (VOCs) (metric tonnes)**	30.17	18.45	53.99	21.24	16.95
SASB-EM-MD-120a.1, GRI 305-7	**Particulate Matter 10 micrometers (PM10) (metric tonnes)** [2]	14.09	15.08	17.88	22.28	21.39
GRI 305-7	**Particulate Matter 2.5 micrometers (PM2.5) (metric tonnes)** [2]	25.25	27.37	26.51	29.36	29.10

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Air Quality - U.S. [12]					
SASB-EM-MD-120a.2, GRI 305-7	Nitrogen Oxide (NO_x) (metric tonnes)	-	-	-	-	35,640.36
SASB-EM-MD-120a.1, GRI 305-7	Sulfur Dioxide (SO_2) emissions (metric tonnes)	-	-	-	-	91.49
SASB-EM-MD-120a.1, GRI 305-7	Volatile Organic Compounds (VOCs) (metric tonnes)	-	-	-	-	5,225.72
SASB-EM-MD-120a.1, GRI 305-7	Particulate Matter 10 micrometers (PM_{10}) (metric tonnes)	-	-	-	-	817.66
GRI 305-7	Particulate Matter 2.5 micrometers ($PM_{2.5}$) (metric tonnes)	-	-	-	-	817.66
	Air Quality - Mexico [12]					
SASB-EM-MD-120a.2, GRI 305-7	Nitrogen Oxide (NOx) (metric tonnes)	-	-	-	-	18.58
SASB-EM-MD-120a.1, GRI 305-7	Volatile Organic Compounds (VOCs) (metric tonnes)	-	-	-	-	6.63

Ecological Impacts

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Water consumption					
-	Total water consumption (million cubic metres) [13, 14, 15]	4.2	7.8	4.5	2.2	5.1
	Waste Impacts					
-	Total hazardous and non-hazardous waste (metric tonnes) [16, 17, 18, 19]	24,759	45,803	158,024	235,198	167,871
SASB EM-MD-160a.4	Number and aggregate volume of hydrocarbon spills (#, barrels)	-	-	-	-	4,852
SASB EM-MD-160a.4	Number and aggregate volume of hydrocarbon spills in Arctic (#, barrels)	n/a	n/a	n/a	n/a	n/a
SASB EM-MD-160a.4	Number and aggregate volume of hydrocarbon spills in Unusually Sensitive Areas (#, barrels)	-	-	-	-	1
SASB EM-MD-160a.4	Aggregate volume of hydrocarbon spills recovered (#, barrels)	-	-	-	-	4,852

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	Environmental Management					
SASB EM-MD-160a.1	**Description of environmental management policies and practices for active operations**	TC Energy's Operational Management System (TOMS) provides requirements for our day-to-day work to protect us, our co-workers, our workplace and assets, the communities we work in, and the environment. Under TOMS, mandated Programs set requirements to manage specific risk areas for TC Energy, including the Environment Program which identifies our requirements to proactively and systematically manage environmental hazards and risks throughout the lifecycle of our assets. As part of our Environment Program, TC Energy completes environmental impact assessments for our projects. The environmental impact assessment includes field studies which examine existing natural resources, biodiversity and land use along our proposed project footprint, such as vegetation, soils, wildlife, water resources, wetland, and protected areas. In order to conserve and protect the environment during construction, information gathered for an environmental impact assessment is used to develop project-specific protection plans, and the Environment Program includes practices and procedures to manage potential adverse environmental effects to these resources during operations. The Environment Program applies to 100% of our operations.				

Competitive Behaviour

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Total monetary losses as a result of legal proceedings associated with federal pipeline and storage regulations					
SASB EM-MD-520a.1, GRI 307-2	Power operations	-	-	-	-	0
SASB EM-MD-520a.1, GRI 307-3	Gas and gas storage operations	-	-	-	-	$631,000
SASB EM-MD-520a.1, GRI 307-4	Liquids pipeline operations	-	-	-	-	0
SASB EM-MD-520a.1, GRI 307-5	Project development	-	-	-	-	$10,000
	Environmental fines					
G4-EN29	Power operations	0	US$11,000	0	0	0
G4-EN29	Gas and gas storage operations	US$15,500	US$1,750	US$5,000	0	US$277.70
G4-EN29	Liquids pipeline operations	0	0	0	0	0
G4-EN29	Project development	US$5,000	US$19,500	0	US$135,340	0
	Total amount invested in renewable energy					
G4-OG2	Total amount invested in renewable energy ($ M) [21]	19.98	16.15	4.45	3.02	4.04

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Assets					
-	Natural gas transmission network (km)	67,300	91,500	91,900	92,600	93,250
-	Natural gas storage capacity (Bcf)	368	653	653	653	653
-	Power facilities (#)	20	17	11	9	7
-	Power generation capacity (MW) [22]	13,100	10,700	6,100	5,200	6,055
-	Liquids pipelines (km)	4,247	4,324	4,874	4,874	4,900
-	Liquids storage capacity (barrels)	-	-	-	-	Over 6.5 million

Operational Safety & Emergency Preparedness

SDG: 8 9

Indicator ID	Indicator	2015	2016	2017	2018	2019
	Pipeline Incidents					
SASB EM-MD-540a.1	**Number of reportable pipeline incidents, % significant** [23]	-	-	-	-	4 (13.3%)
	Pipeline Inspection					
SASB EM-MD-540a.2	**% of natural gas pipelines inspected**	13.91	25.55	17.74	15.75	20.38
SASB EM-MD-540a.2	**% of liquids pipelines inspected** [24]	83.06	32.35	139.64	159.30	109.59
	Releases					
SASB EM-MD-540a.3	**# of accident releases from rail transportation**	n/a	n/a	n/a	n/a	n/a
SASB EM-MD-540a.3	**# of non-accident releases (NAR) from rail transportation**	n/a	n/a	n/a	n/a	n/a

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Reportable gas releases from natural gas pipelines and facilities					
G4-EN24, GRI 306-3, SASB EN-MD-540a.1	**Number of reportable releases (#)** [25]	**-**	**31**	**37**	**37**	**50**
G4-EN24, GRI 306-3, SASB EN-MD-540a.1	Canada	-	14	22	15	8
G4-EN24, GRI 306-3, SASB EN-MD-540a.1	U.S.	-	8	8	13	14
G4-EN24, GRI 306-3, SASB EN-MD-540a.1	Mexico	-	9	7	9	28
G4-EN24, GRI 306-3	**Volume of reportable releases (cubic metres)** [26]	**-**	**2,252,447**	**4,538,083**	**2,222,034**	**6,383,452**
G4-EN24, GRI 306-3	Canada	-	3,131	265,032	457,191	252,504
G4-EN24, GRI 306-3	U.S.	-	2,170,995	4,211,892	1,688,069	6,029,252
G4-EN24, GRI 306-3	Mexico	-	78,321	61,159	76,774	101,696

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	Reportable crude oil spills from pipelines and facilities					
G4-EN24, GRI 306-3, SASB EN-MD-160a.4	**Total number of reportable spills (#)** [27]	**1**	**2**	**2**	**2**	**6**
G4-EN24, GRI 306-3, SASB EN-MD-160a.4	Canada	1	0	1	1	2
G4-EN24, GRI 306-3, SASB EN-MD-160a.4	U.S.	0	2	1	1	4
G4-EN24, GRI 306-3, SASB EN-MD-160a.4	**Total volume of reportable spills (barrels)** [28]	**14.47**	**400.12**	**9,731.45**	**0.63**	**4,889.23**
G4-EN24, GRI 306-3, SASB EN-MD-160a.4	Canada	14.47	0	31.45	0.00	352.00
G4-EN24, GRI 306-3, SASB EN-MD-160a.4	U.S.	0	400.12	9,700.00	0.63	4,537.23

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	In-line inspections					
SASB EN-MD-540a.2	**Number of in-line inspections**	**146**	**201**	**277**	**279**	**313**
SASB EN-MD-540a.2	Canada	90	88	169	149	138
SASB EN-MD-540a.2	Gas	86	87	162	131	129
SASB EN-MD-540a.2	Liquids	4	1	7	18	9
SASB EN-MD-540a.2	U.S.	53	113	108	130	175
SASB EN-MD-540a.2	Gas	43	111	93	112	159
SASB EN-MD-540a.2	Liquids	10	2	15	18	16
SASB EN-MD-540a.2	Mexico	3	0	0	0	0
SASB EN-MD-540a.2	Gas	3	0	0	0	0

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Indicator ID	Indicator	2015	2016	2017	2018	2019
SASB EN-MD-540a.2	**In-line inspections (km/mi)**	**12,958 km/ 8,056 mi**	**18,074 km/ 11,233 mi**	**21,914 km/ 13,620 mi**	**22,091 km/ 13,729 mi**	**24,107 km/ 14,979 mi**
SASB EN-MD-540a.2	Canada	6,392 km/ 3,971 mi	10,715 km/ 6,661 mi	13,306 km/ 8,270 mi	11,750 km/ 7,302 mi	13,136 km/ 8,162 mi
SASB EN-MD-540a.2	Gas	5,243 km/ 3,257 mi	10,400 km/ 6,465 mi	11,232 km/ 6,981 mi	8,530 km/ 5,301 mi	11,110 km/ 6,903 mi
SASB EN-MD-540a.2	Liquids	1,149 km/ 714 mi	315 km/ 196 mi	2,074 km/ 1,289 mi	3,220 km/ 2,001 mi	2,026 km/ 1,259 mi
SASB EN-MD-540a.2	U.S.	6,219 km/ 3,963 mi	7,359 km/ 4,574 mi	8,608 km/ 5,350 mi	10,341 km/ 6,427 mi	10,971 km/ 6,817 mi
SASB EN-MD-540a.2	Gas	3,759 km/ 2,335 mi	6,257 km/ 3,889 mi	4,565 km/ 2,837 mi	5,540 km/ 3,443 mi	7,400 km/ 4,598 mi
SASB EN-MD-540a.2	Liquids	2,460 km/ 1,528 mi	1,102 km/ 685 mi	4,043 km/ 2,513 mi	4,801 km/ 2,984 mi	3,571 km/ 2,219 mi
SASB EN-MD-540a.2	Mexico	357 km/ 222 mi	0 km/ 0 mi	0 km/ 0 mi	0 km/ 0 mi	0 km/ 0 mi
SASB EN-MD-540a.2	Gas	357 km/ 222 mi	0 km/ 0 mi	0 km/ 0 mi	0 km/ 0 mi	0 km/ 0 mi

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Integrity digs					
-	**Completed integrity digs (#)**	**724**	**799**	**936**	**1133**	**846**
-	Canada	639	547	726	853	520
-	Gas	618	545	716	844	497
-	Liquids	21	2	10	9	23
-	U.S.	85	249	209	275	324
-	Gas	73	235	196	257	298
-	Liquids	12	14	13	18	26
-	Mexico	0	3	1	5	2
-	Gas	0	3	1	5	2

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	Third-party damage					
-	**Unauthorized excavations per 1,000km of right-of-way (#)** [29]	1.50	1.28	1.68	1.46	1.90
-	**One Calls per km of right-of-way (#)** [30]	2.76	2.56	5.81	6.62	5.82
-	**Unauthorized Pipeline Encroachments per 1,000km of right-of-way (#)** [31]	3.90	4.62	3.93	3.42	4.64
	Investment in integrity programs					
-	**Investment for natural gas and liquids pipelines ($ B)**	0.80	0.81	1.06	1.30	1.30
	Process safety events					
GRI OG13(a), SASB SASB EN-MD-540a.1	**Number of pipeline ruptures (#)** [32]	**1**	**0**	**1**	**2**	**1**
GRI OG13(a), SASB SASB EN-MD-540a.1	Natural gas pipeline ruptures	1	0	0	2	0
GRI OG13(a), SASB SASB EN-MD-540a.1	Liquids pipeline ruptures	0	0	1	0	1
GRI OG13(a), SASB SASB EN-MD-540a.1	**Number of liquid leaks of > 5 barrels from pipelines and facilities (#)** [33]	0	1	0	1	2
GRI OG13(a), SASB SASB EN-MD-540a.1	**Number of significant natural gas leaks from pipelines and facilities (#)** [34]	10	7	1	2	1

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Emergency preparedness and response exercises					
-	**Total exercises completed (#)**	**125**	**117**	**172**	**196**	**192**
-	Annual field exercises	22	22	23	26	28
-	Field tabletop exercises [35]	67	64	116	139	146
-	Equipment deployment exercises	10	10	12	11	8
-	Annual Tabletop Exercises	26	21	21	20	-
-	**Additional Exercises**	-	-	-	-	10
	Emergency preparedness and response training					
-	**First Responders training (#)** [36]	-	-	253	510	747
-	**Best practice training (Incident Command System) (#)** [37, 38]	2,364	2,537	2,548	3,387	4,797
-	**Regulatory training (HAZWOPER) (#)** [39]	446	404	348	433	1,011

Social Capital

SDG: 8 12

Indicator ID	Indicator	2015	2016	2017	2018	2019
	Indigenous business spending					
-	**Total direct Indigenous spend ($ M) [40]**	**-**	**53.8**	**17.7**	**18.1**	**75**
-	Indigenous direct spend ($ M) [40]	-	35.5	17.7	8.6	70
-	Native American direct spend ($ M) [40, 41]	-	18.3	0.04	9.5	5
-	**Total indirect Indigenous spend ($ M) [42]**	**-**	**106.3**	**57.8**	**160.5**	**382**
-	Indigenous indirect spend ($ M) [42]	-	106.3	57.8	151.0	380
-	Native American indirect spend ($ M) [41, 42]	-	0.03	0.01	9.5	2
	Local community engagement plans					
G4-SO1	**Percentage of operations with local community engagement, impact assessments and development programs (%) [43]**	-	100	100	100	100

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Community Investment					
-	**Direct community investment ($ M)**	14.7	16.6	15.1	23.9	29.6
-	**Community investments by motivation (% of total)**	-	-	-	-	-
-	Social investments [44]	39	48	38	68	70
-	Commercial investments [45]	11	12	8	7	7
-	Philanthropic investments [46]	50	40	54	25	23
-	**In-kind giving ($ M) [47]**	0.3	0.1	2.3	0.2	0.8
-	**Community investment including funds leveraged through outside sources ($ M) [48]**	20.4	21.9	17.0	27.6	34.1
-	**Investments as a percentage of total revenue (%)**	0.15	0.13	0.11	0.19	0.24

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Employee Giving & Volunteering					
-	**Employee and contractor donations ($ M)**	0.75	0.80	0.90	0.98	1.08
-	**Company donations matching employee and contractor donations ($ M)**	0.83	0.93	1.04	1.22	1.43
-	**Volunteer hours logged by employees and contractors (# of hours)**	**8,540**	**11,150**	**14,736**	**25,695**	**36,583**
-	During non-paid time (#)	1,393	2,233	2,908	4,438	7,324
-	During paid time (#)	7,147	8,916	11,828	21,257	29,258
-	**Value of volunteer hours during paid work time ($ M)**	76,228	131,089	138,385	227,887	456,854

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Economic benefits to communities [49]					
-	**Property taxes ($ M)**	517	555	569	569	727
-	**Cash taxes paid, net of refunds ($ M)**	162	105	247	338	713
-	**Total payroll costs** [50]	**1,074**	**1,461.2**	**1,229.6**	**1,213.1**	**1,353.9**
-	Canada ($ M)	699.9	636.6	688.3	678.4	806.8
-	U.S. (US$ M)	261.8	604.6	418.0	377.4	404.0
-	Mexico (Mex$ M)	178.4	196.7	265.2	285.6	325.8
-	**Employee benefits** [51]	**180.8**	**236.8**	**200.3**	**292.2**	**296.8**
-	Canada ($ M)	98.7	84.8	82.7	132.5	148.9
-	U.S. (US$ M)	US$58.7	US$112.5	US$92.6	US$115.6	US$112.0
-	Mexico (Mex$ M)	Mex$14.1	Mex$15.8	Mex$26.5	Mex$28.2	Mex$35.1

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Political Contributions					
-	**Total political contributions made by TC Energy Corporation**	**155,770**	**111,585**	**41,963**	**89,390**	**6,000**
-	Canada	69,395	54,350	22,500	5,150	6,000
-	U.S. [52, 53]	86,375	57,235	19,463	84,240	0
-	**Total political contributions made by TC Energy subsidiaries or separate segregated funds [53, 54]**	**-**	**-**	**-**	**-**	**297,360**
-	Canada	-	-	-	-	0
-	U.S. [53, 54]	8,500	86,050	392,753	274,495	297,360

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Direct economic value generated and distributed					
G4-EC1	**Direct economic value generated ($ M)**	11,353	12,547	13,449	13,679	13,255
G4-EC1	**Direct economic value distributed ($ M)** [55]	**6,905**	**8,072**	**8,689**	**8,829.9**	**9,814.6**
G4-EC1	Plant operating costs, employee wages and benefits, and others	3,250	3,819	3,906	3,591	3,909
G4-EC1	Payments to providers of capital	2,908	3,534	3,952	4,308	4,439
G4-EC1	Payments to government	679	660	816	907	1,437
G4-EC1	Community investment	14.7	16.6	15	23.9	29.6
G4-EC1	**Direct economic value retained ($ M)**	4,448	4,475	4,760	4,849	3,440

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Employment					
G4-10	**Full-time employees (#)**	**5,512**	**7,147**	**6,771**	**7,094**	**7,387**
G4-10	Canada	3,603	3,374	3,390	3,550	3,728
G4-10	U.S.	1,757	3,563	3,112	3,269	3,344
G4-10	Mexico	152	210	269	275	315
G4-10	**Contract professionals (#)**	**2,453**	**3,586**	**3,252**	**4,348**	**3,211**
G4-10	Canada	1,896	1,857	1,757	2,190	2,037
G4-10	U.S.	271	1,312	958	1,744	901
G4-10	Mexico	286	417	537	414	273
G4-11	**Employees represented by independent trade union or covered by collective bargaining agreements (%)**	4.7	5.1	4.6	4.6	4.9

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	New hires and employee turnover					
G4-LA1	**New hire employees (#)**	**385**	**302**	**751**	**899**	**886**
G4-LA1	Canada	226	147	281	402	417
G4-LA1	U.S.	125	117	385	428	387
G4-LA1	Mexico	34	38	85	69	82
G4-LA1	**New hire employees by age group (%)**					
G4-LA1	< 30 years of age [56]	33.0	26.5	26.0	27.0	26.1
G4-LA1	30 - 50 years of age	57.0	57.3	65.0	62.0	64.3
G4-LA1	> 50 years of age	10.0	16.2	9.0	11.0	9.6
G4-LA1	**New hire employees by gender (%)**					
G4-LA1	Female	30.0	30.0	26.0	31.0	28.9
G4-LA1	Male	70.0	70.0	74.0	69.0	71.1

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Indicator ID	Indicator	2015	2016	2017	2018	2019
G4-LA1	**Employee total turnover rate (%)**	**17.4**	**11.6**	**15.0**	**7.0**	**8.1**
G4-LA1	Employee voluntary turnover rate [57]	5.1	3.6	4.0	5.0	4.8
G4-LA1	Employee involuntary turnover rate [58]	12.3	8.0	11.0	2.0	3.3
G4-LA1	**Employee total turnover rate by region (%)** [59]					
G4-LA1	Canada	18.1	7.8	7.5	5.8	6.5
G4-LA1	U.S.	14.8	7.5	21.1	7.2	9.4
G4-LA1	Mexico	11.8	6.6	10.3	9.6	14.6
G4-LA1	**Employee turnover by age group (%)** [59]					
G4-LA1	< 30 years of age	15.6	6.5	13.6	5.8	4.7
G4-LA1	30 - 50 years of age	14.1	6.8	13.2	6.2	6.6
G4-LA1	> 50 years of age	21.5	7.5	15.3	8.5	12.3
G4-LA1	**Employee turnover by gender (%)** [59]					
G4-LA1	Female	15.4	6.8	12.2	7.7	8.1
G4-LA1	Male	19.4	7.6	14.8	6.5	8.3

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Diversity of governance bodies and employees [60]					
G4-10	**Women in workforce (%)**	30.5	27.5	28.0	28.0	28.2
G4-10	Full-time employees	30.5	27.5	28.0	28.0	28.2
G4-10	Contractors	31.8	28.2	27.4	23.0	25.9
G4-LA12	**Diversity of governance bodies (% of total board members)**					
G4-LA12	Gender					
G4-LA12	Women	30.0	30.0	23.1	25.0	25.0
G4-LA12	Men	70.0	70.0	76.9	75.0	75.0
G4-LA12	Age					
G4-LA12	< 30 years of age	0.0	0.0	0.0	0.0	0.0
G4-LA12	30 - 50 years of age	0.0	0.0	0.0	0.0	0.0
G4-LA12	> 50 years of age	100.0	100.0	100.0	100.0	100.0

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Indicator ID	Indicator	2015	2016	2017	2018	2019
G4-LA12	**Diversity of executive management (%)** [61]					
G4-LA12	Gender					
G4-LA12	Women	22.2	25.0	25.0	33.0	30.0
G4-LA12	Men	77.8	75.0	75.0	67.0	70.0
G4-LA12	Age					
G4-LA12	< 30 years of age	0.0	0.0	0.0	0.0	0.0
G4-LA12	30 - 50 years of age	11.1	0.0	0.0	0.0	20.0
G4-LA12	> 50 years of age	88.9	100.0	100.0	100.0	80.0

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Indicator ID	Indicator	2015	2016	2017	2018	2019
G4-LA12	**Diversity of top management (%)** [62]					
G4-LA12	Gender					
G4-LA12	Women	14.8	16.7	21.2	25.0	35.3
G4-LA12	Men	85.2	83.3	77.2	75.0	64.7
G4-LA12	Age					
G4-LA12	< 30 years of age	0.0	0.0	0.7	0.0	0.0
G4-LA12	30 - 50 years of age	35.1	60.5	61.5	52.1	47.1
G4-LA12	> 50 years of age	64.9	39.5	37.8	47.9	52.9

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Indicator ID	Indicator	2015	2016	2017	2018	2019
G4-LA12	**Diversity of junior management (%)** [63]					
G4-LA12	Gender					
G4-LA12	Women	23.5	23.9	25.8	26.9	28.6
G4-LA12	Men	76.5	76.1	74.2	73.1	71.4
G4-LA12	Age					
G4-LA12	< 30 years of age	0.0	0.0	0.3	0.3	0.5
G4-LA12	30 - 50 years of age	62.2	60.5	63.4	58.2	61.7
G4-LA12	> 50 years of age	37.8	39.5	35.2	41.5	37.8

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Indicator ID	Indicator	2015	2016	2017	2018	2019
G4-LA12	**Diversity of non-management (%)** [64]					
G4-LA12	Gender					
G4-LA12	Women	31.6	28.0	27.3	28.4	28.1
G4-LA12	Men	68.4	72.0	72.7	71.6	71.9
G4-LA12	Age					
G4-LA12	< 30 years of age	15.7	13.5	12.4	13.6	12.2
G4-LA12	30 - 50 years of age	54.7	55.7	58.4	60.6	59.0
G4-LA12	> 50 years of age	29.6	30.8	29.2	25.8	28.8

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Indicator ID	Indicator	2015	2016	2017	2018	2019
G4-LA12	**Canadian diversity analysis (%)**					
G4-LA12	Women	36.6	36.5	36.3	36.6	36.9
G4-LA12	Indigenous	2.5	2.4	2.4	2.5	2.4
G4-LA12	Persons with disabilities	3.4	3.2	3.1	3.4	3.3
G4-LA12	Visible minorities (excl. Indigenous)	20.6	20.6	21.7	21.0	21.4
G4-LA12	**American diversity analysis (%)**					
G4-LA12	Women	18.3	18.7	18.7	18.6	18.5
G4-LA12	Minorities (incl. American Indians/Alaska Natives)	19.6	13.5	13.1	13.3	13.4
G4-LA12	Individuals with disabilities	3.1	2.1	2.1	2.6	3.0
G4-LA12	Veterans	10.5	7.1	6.4	6.2	5.8
G4-LA12	**Mexico diversity analysis (%)**					
G4-LA12	Women	28.3	30.1	27.5	30.2	27.0

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Governance [65]					
-	Size of Board (#)	12	13	13	12	12
-	Independent directors (%)	92	92	92	92	92
-	Women on Board (%)	25	23	23	25	25
-	Board Diversity policy	No	Yes	Yes + 30% target	Yes + 30% target	Yes + target of 30% women
-	Number of board interlocks	0	0	0	0	1
-	External board service limits for independent directors	6 public company boards in total	6 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	63	62	63	62	61
-	All committees independent [66]	Yes	Yes	Yes	Yes	Yes
-	Annual director elections	Yes	Yes	Yes	Yes	Yes
-	Individual director elections	Yes	Yes	Yes	Yes	Yes
-	Majority voting policy	Yes	Yes	Yes	Yes	Yes
-	Independent executive compensation consultant	Yes	Yes	Yes	Yes	Yes
-	Clawback policy	Yes	Yes	Yes	Yes	Yes

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Indicator ID	Indicator	2015	2016	2017	2018	2019
-	Double-trigger vesting on change of control	Yes	Yes	Yes	Yes	Yes
-	Separate chair and CEO	Yes	Yes	Yes	Yes	Yes
-	Director retirement age	70	70	70	70	70
-	Director share ownership requirements	4x retainer	4x retainer	4x retainer	4x retainer	4x retainer
-	Executive share ownership requirements	5x (CEO), 2x (other named executives)	5x (CEO), 2x (other named executives)	5x (CEO), 2x (other named executives)	5x (CEO), 3x (executive vice-presidents), 2x (senior vice-presidents), 1x (vice-presidents)	5x (CEO), 3x (executve vice-presidents), 2x (senior vice presidents), 1x (vice-presidents)
-	CEO share ownership post-retirement hold period	-	-	-	1 year	1 year
-	In-camera sessions at every Board and committee meeting	Yes	Yes	Yes	Yes	Yes
-	Annual say on pay	Yes	Yes	Yes	Yes	Yes
-	Code of business ethics	Yes	Yes	Yes	Yes	Yes
-	Board, committee and director evaluations annually	Yes	Yes	Yes	Yes	Yes
-	Board orientation and education program	Yes	Yes	Yes	Yes	Yes

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Indicator ID	Indicator	2015	2016	2017	2018	2019
	Occupational health and safety					
G4-LA6	**Employees (#)**	-	-	-	-	
G4-LA6	Fatalities	0	0	1	0	0
G4-LA6	Canada	-	-	0	0	0
G4-LA6	U.S.	-	-	1	0	0
G4-LA6	Mexico	-	-	0	0	0
G4-LA6	**Total recordable case rate [67]**	**0.61**	**0.90**	**0.59**	**0.58**	**0.42**
G4-LA6	Canada (# of recordable cases)	-	-	17	17	14
G4-LA6	U.S. (# of recordable cases)	-	-	22	19	16
G4-LA6	Mexico (# of recordable cases)	-	-	1	3	0
G4-LA6	**Away from work case rate [68]**	**0.27**	**0.25**	**0.19**	**0.16**	**0.10**
G4-LA6	Canada (# of away from work cases)	-	-	1	7	4
G4-LA6	U.S. (# of away from work cases)	-	-	12	4	3
G4-LA6	Mexico (# of away from work cases)	-	-	0	0	0

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Indicator ID	Indicator	2015	2016	2017	2018	2019
-	**Vehicle incident frequency rate** [69]	2.01	1.07	2.07	1.84	1.94
-	**High potential incidents rate** [70]	0.11	0.28	0.16	0.42	0.30
G4-LA6	**Absentee rate**					
G4-LA6	Casual absences [71] (average monthly rate)	-	2.05	1.89	1.84	1.81
G4-LA6	Short term disability (STD) [72] (average monthly rate)	-	2.33	2.51	2.15	2.27
G4-LA6	Workers Compensation (WCB) [73] (average monthly rate)	-	0.13	0.09	0.07	0.05
G4-LA6	**Average lost days per person [74] (annual rate)**	-	4.51	4.49	4.06	4.13
G4-LA6	**Contractors (#)**					
G4-LA6	Fatalities	0	0	0	0	0
G4-LA6	Canada	-	-	0	0	0
G4-LA6	U.S.	-	-	0	0	0
G4-LA6	Mexico	-	-	0	0	0

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Indicator ID	Indicator	2015	2016	2017	2018	2019
G4-LA6	**Total recordable case rate**	**1.17**	**1.38**	**0.95**	**0.99**	**1.13**
G4-LA6	Canada (# of recordable cases)	-	-	74	91	109
G4-LA6	U.S. (# of recordable cases)	-	-	68	97	34
G4-LA6	Mexico (# of recordable cases)	-	-	32	33	8
G4-LA6	**Away from work case rate**	**0.15**	**0.13**	**0.01**	**0.15**	**0.11**
G4-LA6	Canada (# of recordable cases)	-	-	4	2	8
G4-LA6	U.S. (# of recordable cases)	-	-	10	26	4
G4-LA6	Mexico (# of recordable cases)	-	-	4	5	3
-	**Vehicle incident frequency rate**	3.01	2.52	2.45	2.41	1.80
-	**High potential incidents rate (%)**	0.63	0.49	0.55	0.93	0.74

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Greenhouse Gas Emissions

1. TC Energy calculates its GHG emissions using a combination of methods required by various regulations in the different jurisdictions where we operate.

   We report our emissions to British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec, Environment and Climate Change Canada, the U.S. Environmental Protection Agency, California, Oregon, Washington, and Mexico's Ministry of Environment and Natural Resources (SEMARNAT). These methods can include, but are not limited to, direct measurement and use of emission factors in conjunction with operating conditions.

   The 2018 and 2019 dataset reported within includes source emissions which would not be mandated under regulatory reporting regimes, as they are considered below reporting thresholds. They have been disclosed in this year's Report, for inclusiveness and transparency.

   These updated emissions sources include:

   - Canada and U.S. Scope 1 emissions from Liquid Pipelines entities,
   - Scope 1 emissions from various U.S. compressor stations from Natural Gas Pipelines entities,
   - Scope 2 emissions from Canada Gas Storage entities, and
   - Canada and U.S. Scope 2 emissions from Liquid Pipelines operations.

   Reported emissions have been adjusted based on legal entity ownership as of December 31, 2019, as disclosed in our 2019 Annual Report.

   TC Energy uses IPCC Fourth Assessment Report (AR4 - 100 year) global warming potentials (GWPs) in the calculation of Scope 1, Scope 2 and Scope 3 GHG emissions.

2. 2018 figures have been adjusted to reflect updated 2019 reporting methodologies, and improved data availability, to ensure transparency and accurate year-over-year comparison.
3. Year-over-year Scope 1 GHG variances at our Liquids Pipelines assets is attributed to the inclusion of emissions from our U.S. Liquids Pipelines asset (Keystone) in 2019 and reflects the sale of an 85 per cent equity interest in Northern Courier in July 2019.
4. Year-over-year Scope 1 GHG variances at our Power and Storage assets is attributed to changes in operational conditions as well as the divestiture of the Coolidge generating station in May 2019.
5. "Corporate" Scope 1 Emissions are indicative of calculated emissions associated with transportation (aviation and vehicle). For consistency, we have renamed this category, previously labeled Transportation Fuel, in alignment with reporting emissions per business segment.
6. Activities listed reflect key operational functions and do not total the reported Total Scope 1 GHG emissions, as the following activities have not been reported as separate activity metrics: hydrofluorocarbon (HFC) emissions, sulphur hexafluoride (SF6) emissions, and corporate (related to vehicle and aviation transportation).
7. Estimated value; assumes Canada Natural Gas Pipeline, Canada Power, and Canada Gas Storage calculated Scope 1 emissions are covered by reduction regulations
8. Scope 2 emissions variances year-over-year are attributed to demand; less electricity was purchased, across all business segments, in 2019.
9. TC Energy's calculated GHG intensity within our natural gas business segment are based on a throughput denominator, calculated based on recommendations in jurisdictions where we operate. The relationship between natural gas transmission pipeline GHG emissions and the volume of gas transported is complex. The nature of a transmission network, such as a single, long-haul pipeline with few connections or points where gas is added and removed from the system, will have a different design (including operational equipment) and emissions profile than highly integrated networks with a large number of "branches" over a smaller geographic area. In addition, the amount of GHGs released during operation does not have a linear relationship to the volume of gas that is transported on the system.

   Comparisons of emissions intensities between natural gas transmission pipeline systems must consider the type of pipeline network and the service that it is providing.

   An emission intensity for our Liquids Pipeline business segment has not been calculated, as further development of an appropriate denominator is ongoing.
10. Many of TC Energy's power generation assets also generate a heat product, which is not accounted for here. Therefore, the emissions intensity presented for this indicator is only partially representative of the company's true emissions intensity.
11. Scope 3 GHG emissions cover 15 categories of emissions, and TC Energy reports on certain categories (fuel-and energy related activities, business travel and upstream leased assets) out of the total 15 categories of Scope 3 emissions. This data has previously been reported externally through CDP Climate Change Surveys.

Air Quality

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

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13. Total pipeline asset water consumption is defined as water used for hydrostatic testing. The water used in the hydrostatic testing is typically withdrawn from nearby dugouts, lakes, watercourses or municipal sources, in accordance with applicable permits. Prior to discharge, the water may be filtered if required and sampled as needed to confirm the water meets the permitted requirements and applicable federal and/or provincial and state water quality standards. The water will then usually be discharged to land or in or near the same watershed. See hydrostatic test fact sheet for more details on hydrostatic testing at TC Energy: TCEnergy.com/HydrostaticTesting
14. Total Power water consumption in 2019 is inclusive of all TC Energy Power operations assets, including:
    - Coolidge (partial data as it was sold May 21, 2019)
    - Redwater
    - Bear Creek
    - Carseland
    - Halton Hills
    - Becancour
    - Napanee

    Excluded in 2019 is Mackay River consumption which is accounted for by third-party host; and water used as once-through cooling water.
15. TC Energy uses the DJSI definition for water consumption and defines it as water withdrawn, net of water discharged to the source with higher or equal quality. TC Energy's total water consumption is equivalent to the total of water withdrawn for the above listed facilities. None of our assets meets the DJSI criteria of discharged to the source with higher or equal quality. Discharged water is not returned to the source with equal or higher quality, and cannot be subtracted from water withdrawn to determine water consumption. Therefore all water is considered consumed even if it is sampled as needed to confirm the water meets the permitted requirements and applicable federal and/or provincial and state water quality standards and discharged to a water source, or in or near the same watershed.
16. TC Energy uses the DJSI definition for water consumption and defines it as water withdrawn, net of water discharged to the source with higher or equal quality. TC Energy's total water consumption is equivalent to the total of water withdrawn for the above listed facilities. None of our assets meets the DJSI criteria of discharged to the source with higher or equal quality. Discharged water is not returned to the source with equal or higher quality, and cannot be subtracted from water withdrawn to determine water consumption. Therefore all water is considered consumed even if it is sampled as needed to confirm the water meets the permitted requirements and applicable federal and/or provincial and state water quality standards and discharged to a water source, or in or near the same watershed.
17. The 2019 data includes operations, project and remediation waste for TC Energy operated assets including the Mexico gas assets, all U.S. Gas systems, Foothills Pipeline, NGTL System, Canadian Mainline, Keystone Pipeline (U.S. and Canada), Alberta Energy Regulator (AER) regulated pipelines and tank terminals in Alberta, Canada, Canadian gas storage assets, Canadian power plants (excluding the assets in Alberta that are third-party hosted sites and assets in Ontario which have since been divested). Some gaps in 2019 data exist for some non-hazardous pipeline waste in Ontario and hazardous and non-hazardous waste for Trans-Quebec and Maritime assets. Keystone XL and Coastal Gas Link project wastes are not included.

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18. Compared to the 2019 data, the 2017 data did not include the Mexico gas assets, Foothills Pipeline, NGTL System, Canadian Mainline, TQM, Canada and U.S. Power Assets and Keystone U.S. and Canada, AER regulated pipelines and tank terminals in Alberta, Canada. The 2018 data did not include the assets not included in 2017 with the exception of Keystone pipeline (U.S.), and the AER regulated pipelines and tank terminals in Alberta, Canada.
19. The 2019 data includes hazardous and non-hazardous industrial wastes inclusive of some recycled materials such as pipeline liquids, off-spec fuels, universal waste, and spill cleanup materials. These recycled material volumes cannot be confirmed therefore they have not been subtracted from this dataset.
20. Unless specifically stated by the assets, the specific gravity of waste liquids was assumed to be 1.0 in order to convert the volumes to mass.

Competitive Behaviour

21. Figures are based on capital spend. Historical figures from 2016-2017 which previously reflected net book value have been adjusted to reflect actual spend.

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22. 2019 value includes assets held for sale. On April 29, 2020, we completed the sale of our Halton Hills and Napanee power plants as well as our 50 per cent interest in Portlands Energy Centre.
23. Per cent significant definition adjusted to reflect TC Corporate Scorecard definition for % significant reportable pipeline incident:
    - Ruptures, crude oil release >5 barrels and significant gas release (leak):

    A significant natural gas leak is defined as a leak that meets one or more of the following criteria:
    - Direct safety impact on the public, our employees or contractors (e.g., loss of gas service, first aid, injury or fatality)
    - Results in an uncontrolled fire
    - Results in regulatory enforcement
    - Causes an "other" significant unplanned event not covered by any of the criteria above (e.g., significant impact on Shippers or Industrial Customers)
    - A leak is defined as an unplanned, uncontrolled release of pipeline product that does not immediately impact the serviceability of the pipeline.
    - A rupture is defined as an unplanned, uncontrolled release of pipeline product that immediately impacts the serviceability of the pipeline.
24. Values above 100 per cent indicate that some sections were inspected multiple times using different technologies

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25. 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 are lower in the U.S. than Canada with respect to the cost of damage to operators and/or adjacent facilities. In the U.S., a release resulting in damages of $50,000 to the operator is considered a reportable release. In Canada, a release resulting in damages of $50,000 is below the reporting threshold for a reportable release. In Mexico, a reportable release is not directly tied to the cost damage.
26. Reporting thresholds are variable depending on jurisdiction and therefore releases are not wholly comparable by jurisdiction or year over year.
27. The GRI defines a significant spill is a hydrocarbon spill greater than 100 bbl released into the environment and/or a hydrocarbon spill released into a sensitive environment. TC Energy defines a significant spill as a reportable spill. A reportable spill is defined as one that is reportable to a regulatory body, such as a federal or provincial or state regulator.
28. Historical data for 2016 and prior has been converted from litres to barrels. The conversion factor used is 1 litre = 0.006289811 barrel.
29. 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.
30. Local one-call centres field requests to have all underground utilities located and marked free of charge, prior to any commercial or residential project involving digging. These requests are be received via telephone or online.
31. TC Energy defines unauthorized encroachments as those that include activities carried out without authorization from local one-call centres.
32. TC Energy defines a rupture as an unplanned, uncontrolled release of liquid that immediately impacts the serviceability of the pipeline.
33. TC Energy defines a leak as an unplanned, uncontrolled release of liquid that does not immediately impact the serviceability of the pipeline.
34. TC Energy defines a significant natural gas leak as a leak that meets one or more of the following criteria:
    - Direct safety impact on the public, our employees or contractors (e.g., loss of gas service, first aid, injury or fatality)
    - Results in an uncontrolled fire
    - Results in regulatory enforcement
    - Causes an “other” significant unplanned event not covered by any of the criteria above (e.g., significant impact on Shippers or Industrial Customers)
35. Field tabletop exercises involves key personnel discussing simulated scenarios in an informal setting.
36. 2018 data includes training for Canadian Gas Operations (CGO), in addition to Canadian and U.S. liquids assets. Years prior to 2018 exclude CGO data.
37. First responders are provided a specialized training course on how to respond to and manage an incident that educates them on the process for conducting proper on-site assessments, how to evaluate tactical response equipment and in some cases, how to stabilize an incident.
38. Best practice training includes all ICS training (100, 200, 300, 320) and the following ICS role specific training - ICS Incident Commander, ICS Liaison Officer, ICS Logistics Section, ICS Planning Section and IST Safety Officer training.
39. Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) regulates the safety and health of the employees involved in management and clean-up operations at uncontrolled hazardous waste sites, employees engaged in certain hazardous waste sites, and employees engaged in certain hazardous waste.

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40. TC Energy's direct spend with prime/general suppliers.
41. CAD currency conversion exchange rate: $1 USD: 1.3364 CAD (April 4, 2019)
42. TC Energy's prime/general suppliers' spend on labour, subcontractors, materials and expenses.
43. Indicator applies to Canada, U.S. and Mexico.
44. TC Energy defines social investments as long-term strategic involvement in community partnerships that address a specific range of social issues and are important to the company or to company stakeholders.
45. TC Energy defines commercial investments as activities in the community that directly support our business objectives or that promote or protect our commercial interests.
46. TC Energy defines philanthropic investments as one-off or intermittent donations in response to charity appeals or in support of employee charitable activities.
47. TC Energy defines in-kind giving as donations of equipment or resources to support community programs.
48. Community investments including funds leverage through outside sources takes into consideration contributions to community projects that can be directly linked to TC Energy's involvement (but are not included in the investment cost), including additional investment generated from other companies, governments and TC Energy employees.
49. For total payroll costs and total employee benefits we have applied December 31, 2018 Bank of Canada Exchange Rate USD to CAD 1.3642, MXN to CAD 0.06942
50. Total payroll costs are based on T4 Box 14 of Salaried, Hourly and Board of Directors, W2 Box 1, and Constancia de Percepcions for Canadian, U.S., and Mexican core employees.
51. Employee benefit costs include the overall costs for the following programs, where applicable: pension plans, benefits (including medical, dental, vision), stock and savings plans, life and accident insurance, long-term disability, employee-assistance programs and other benefits not included in Total Payroll Cost.
52. Contributions are often related to the election cycle and as such may vary depending on the volume and status of elections ongoing in any given year.
53. Conversion rates based on TC Energy's Quarterly Economic Assumptions: 1 USD = 1.4 CAD
54. The TC Energy PAC is a separate segregated fund (SSF) under U.S federal election law, not a subsidiary. TC Energy U.S. Services PAC is a connected political action committee to TC Energy Corporation, which means TC Energy. can pay for its administrative costs but cannot directly deposit any funds into it.
55. Direct economic value distributed includes:
    - Plant operating costs, employee wages and benefits, and others;
    - Payments to providers of capitals;
    - Payments to government; and,
    - Community investment

Human Capital

56. 2016 historical data was updated based on record analysis.
57. Voluntary turnover includes employees who retired or resigned from employment at TC Energy.
58. Involuntary turnover includes divestitures, severances, discharges and layoffs.
59. Historical data from 2015-2018 has been updated to reflect an improvement in reporting methodology for employee total turnover rate by region, age group and gender. For these indicators, the updated metrics reflect the employee turnover percentage based on the total population within the respective category rather than the proportion of the total employee turnover percentage.
60. 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 do we track and voluntarily report Mexico gender workforce representation.
61. Executive management at TC Energy includes Chief Executive officer (CEO) and Executive Leadership Team (ET) roles, including Executive Vice Presidents.
62. Top management at TC Energy includes roles that are Executive level E1 and E2, including Senior Vice President and Vice President roles.
63. Junior management at TC Energy includes roles of M1 through M3.

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64. Non-management at TC Energy includes any roles in which individuals are not responsible for management of other employees and technical roles. This excludes co-op and summer students.
65. As of Dec. 31, 2019. See Management Information Circular and website for subsequent updates.
66. Audit, Governance and HR committees are entirely independent, and HSSE committee must be a majority independent.
67. TC Energy defines total recordable case rate as the number of recordable cases related to a common exposure base of 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. TC Energy defines a recordable incident (case) as any incident occurring under management control. Incidents not under management control include: pre-existing conditions, third-party- initiated incidents, incidents requiring no corrective action, or incidents not directly work-related.
68. 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 100 full-time workers. This performance indicator is often referred to as the Lost-Time Case Rate.
69. 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 (regardless of fault) involves a fleet or rental motor vehicle that results in an injury to any person or damage to any vehicle or property, unless the vehicle was safely and legally parked at the time of the incident.
70. TC Energy defines high potential incidents rate as incidents with a high potential to result in serious, debilitating injury to the worker related to a common exposure base of 100 full-time employees. Examples of high potential incidents include, but are not limited to, high-speed vehicle incidents, vehicle rollovers, high-voltage or high-pressure incidents, injuries to the head, falls from heights. Vehicle incidents involving animal strikes are not included in this indicator and have been removed from this data.
71. TC Energy defines casual absences as when an employee is medically unable to work for up to 36 continuous work hours due to a non-work related illness or injury.
72. TC Energy defines short-term disability absences as a medical absence lasting more than 36 consecutive hours away from work due to a non-occupational illness or injury. Short-term disability is a company-funded income continuance program from which qualifying employees can derive income replacement for a non-work-related illness or injury from the first day to twenty-six (26) weeks of absence.
73. TC Energy defines Workers' Compensation Board 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.
74. TC Energy calculated average lost days per person through combining the total lost days in Canada, the U.S., and Mexico, and divided this by the total headcount across all three regions