

Delivering energy responsibly.

2018 ESG Data Sheet





Cover Photo: Charleston, West Virginia is home to more than 500 of our employees and our Charleston office includes the Natural Gas Control Center for the Eastern United States. Our roots in West Virginia run deep, dating back more than 100 years. Today, we safely and reliably operate more than 2,500 miles of natural gas pipeline in the Mountain State.

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 Global Reporting Standard (GRI), Sustainability Accounting Standards Board (SASB) and Task Force for Climate-Related Financial Disclosure (TCFD), this data sheet shows our initial alignment to GRI and SASB, and complements the TCFD disclosures in our May 2019 *Report on Sustainability and Climate Change*. 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, 2018 for all TC Energy assets. Scope and boundary information for prior years can be found in previous years' data sheets. Footnotes provide additional information on 2018 data boundaries, definitions and methodology where applicable. A dash (-) indicates data that's unavailable for prior years.

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.

Who we are

For over 65 years, TC Energy has proudly delivered the energy millions of North Americans rely on to power their lives and fuel industry.

Guided by our values of safety, responsibility, collaboration and integrity, our more than 7,000+ employees are deeply rooted in their communities and ensure that we develop and operate our facilities safely, reliably and with minimal impact on the environment. We are committed to listening to our neighbours and working with all our stakeholders to develop better project plans and create long-term opportunities and economic benefits in the communities where we operate across Canada, the U.S. and Mexico.

In May 2019, we changed our name from TransCanada to TC Energy to better reflect the scope of our operations and to reinforce our position as a leading North American energy infrastructure company. Whether our stakeholders know us as TC Energy in English, TC Énergie in French, or TC Energía in Spanish, our neighbours, partners and investors can continue to count on us to follow through on our commitments and live up to our values in everything we do.

Natural Gas Pipelines

25% of North America's supply

Our 92,600-kilometre (57,500-mile) portfolio of natural gas pipelines transports more than 25 per cent of the daily North American production of abundant, low-cost, clean-burning natural gas. This pipeline network strategically connects growing supply in the most prolific and lowest cost basins on the continent to key markets across Canada, the U.S. and Mexico. We also operate the continent's largest natural gas storage business, with more than 650 billion cubic feet (Bcf) of regulated and unregulated storage capacity.

Liquids Pipelines

2 billion+ barrels delivered safely

Our 4,900-kilometre (3,000-mile) liquids pipeline system connects growing continental oil supplies to key refinery markets in the U.S. Midwest and Gulf Coast, where it is converted into gasoline and other petroleum products we use every day. Our Keystone Pipeline System has long-term contracts to ship 555,000 barrels of crude oil per day (bbl/d) and delivers approximately 20 per cent of western Canadian production to U.S. markets.

Power and Storage

6 million homes powered

TC Energy owns or has interests in 11 power generation facilities with capacity of approximately 6,600 megawatts – enough to power more than 6 million homes. Nearly half of the power we provide is generated from an emission-less nuclear power facility and we are leaders in the development and operation of high-efficiency natural gas-fired and cogeneration power facilities.

Operational overview

	2014	2015	2016	2017	2018
Assets					
Natural gas transmission network (km)	68,000	67,300	91,500	91,900	92,600
Natural gas storage capacity (Bcf)	368	368	653	653	653
Power facilities (#)	19	20	17	11	11
Power generation capacity (MW)	10,900	13,100	10,700	6,100	6,600
Liquids Pipelines (km)	4,247	4,247	4,324	4,874	4,874



Environment

At TC Energy, we're committed to protecting the environment. Not just because we have to, but because we want to.

Whether it's designing, building or operating energy infrastructure, we are committed to being responsible environmental stewards on the land we share – and our strict environment principles of stewardship, protection and performance guide our decisions every day.

We respect the diversity of the landscapes where we operate and work to manage our environmental footprint while meeting the world's growing demand for reliable and affordable energy. That means we are always working to reduce our land disturbance, carbon intensity, energy consumption and water use throughout the entire life cycle of our assets.

We undertake field studies and consult with stakeholders, Indigenous groups and landowners to develop specific environmental protection plans on all our projects to ensure all natural resources are protected to maintain their natural function within the environment.

A sustainable energy system

47% power generated from
emission-less sources

Nearly half the electricity we generate is emissionless power from Bruce Power, which provides approximately one-third of Ontario's electricity supply. Our vast network of pipelines have played an important role in the replacement of coal-fired power generation with natural gas, which has resulted in significant greenhouse gas emissions reductions across our major markets.

Managing our footprint

100,000+ acres of
land reclaimed

We believe that when we build an asset, we temporarily borrow the land. Once our projects are constructed, we reclaim the land to equivalent capability. We have successfully reclaimed thousands of acres of land throughout North America over the course of more than 65 years of operations.

Environmental partnerships

75+ initiatives
in 2018

We partner with national and local organizations to help conserve natural habitats, protect species at-risk and promote the importance of a healthy environment throughout the communities where we live and work across North America.

Indicator	Standards	2014	2015	2016	2017	2018
Scope 1 Greenhouse Gas Emissions (GHG)						
Direct GHG emissions (tCO ₂ e) ¹	GRI 305-1 SASB EM-MD-110a.1	12,700,000	13,000,000	16,118,000	12,500,000	13,500,000
Natural Gas Pipelines	GRI 305-1 SASB EM-MD-110a.1	7,400,000	7,300,000	8,300,000	8,700,000	10,200,000
Liquids Pipelines	GRI 305-1 SASB EM-MD-110a.1	0	0	0	0	0
Power	GRI 305-1 SASB EM-MD-110a.1	5,300,000	5,700,000	7,800,000	3,800,000	3,300,000
Transportation fuel	GRI 305-1 SASB EM-MD-110a.1	-	-	18,000	62,400	50,300
Greenhouse Gas Emissions intensities						
Natural gas pipelines emissions intensity (tCO ₂ e/Bcf) ²	GRI 305-4	520	560	-	-	-
United States	GRI 305-4	-	-	293	280	271
Canada	GRI 305-4	-	-	991	779	898
Mexico	GRI 305-4	-	-	136	145	229
Power generation emissions intensity (tCO ₂ e/MWh) ³	GRI 302-3	0.17	0.15	0.19	0.12	0.10

Indicator	Standards	2014	2015	2016	2017	2018
Scope 2 Greenhouse Gas Emissions (GHG)						
Indirect GHG emissions (tCO ₂ e)	GRI 305-2	190,000	190,000	350,000	343,700	468,000
Natural Gas Pipelines	GRI 305-2	190,000	190,000	350,000	335,000	455,000
Power	GRI 305-2	2,900	4,000	7,000	8,700	13,000
Total direct and indirect GHG emissions (tCO ₂ e)	GRI 305-2	12,900,000	13,300,000	16,500,000	12,843,700	13,968,000
Natural Gas Pipelines	GRI 305-2	7,600,000	7,500,000	8,700,000	9,035,000	10,655,000
Power	GRI 305-2	5,300,000	5,700,000	7,800,000	3,808,700	3,313,000

Indicator	Standards	2014	2015	2016	2017	2018
Air quality emissions⁴						
Nitrogen Oxides (NOx) emissions	GRI 305-7 SASB EM-MD-120a.1	11,274	12,231	13,221	12,903	13,832.41
Sulfur Dioxide (SO ₂) emissions	GRI 305-7 SASB EM-MD-120a.1	20	0	0	0	0
Volatile organic compounds (VOCs)	GRI 305-7 SASB EM-MD-120a.1	18	30	18	54	21.24
Particulate Matter 2.5 micrometers (PM2.5)	GRI 305-7 SASB EM-MD-120a.1	23	25	27	26	31.66
Particulate Matter 10 micrometers (PM10)	GRI 305-7 SASB EM-MD-120a.1	13	14	15	18	25.87
Carbon Monoxide (CO)	GRI 305-7 SASB EM-MD-120a.1	3,265	3,496	3,616	3,954	4,412.96

Indicator	Standards	2014	2015	2016	2017	2018
Emissions expenses						
Expenses under existing GHG pricing programs (CAD\$ M) ⁵	GRI 201-2	54	59	62	63	63
Water consumption						
Total water consumption (million cubic metres) ^{6,7,8}	n/a	3.8	4.2	7.8	4.5	2.2
Waste						
Total hazardous and non-hazardous waste (metric tons) ^{9,10,11}	n/a	-	-	-	158,024	235,198

Additional Environmental metrics are listed under the Leadership and Governance SASB Dimension, Critical Incident Risk Management General Issue Category beginning on page 30



Social and Human Capital

An engaged community

Making sure stakeholders are meaningfully engaged and respected is critical to TC Energy's success. The strength of these relationships has a direct impact on our ability to competitively build and operate our assets. Building relationships with local communities, Indigenous groups and landowners helps us understand our potential impacts on the community, mitigate adverse effects and seek opportunities for economic participation and community investments.

By engaging early with our stakeholders and listening, we create project plans with better outcomes for everyone involved. While we have built strong relationships with thousands of communities, backed by generations of co-operation and trust, we are also committed to earning public confidence from those communities we have not yet worked with.

A thriving workplace

Being a fair and honest employer for our 7,000+ employees across Canada, the U.S. and Mexico is a key priority at TC Energy. We encourage diversity of ideas and thought, and match our people's giving and volunteering efforts. We also offer comprehensive training and development opportunities, and personalized benefits and retirement programs.

We provide clear and open lines of communication and a code of business ethics with regular training, supported by a robust set of policies and practices aligned to an inclusive and respectful workplace, all overseen by our Board's Human Resources Committee. Beyond all this, our people help build and maintain one of the most wide-reaching energy infrastructure systems on the continent and support the North American way of life by supplying heat to homes, power to cities and fuel for transportation.

Engaging with Indigenous groups

138 groups engaged
in 2018

We strive to build co-operative, mutually beneficial and lasting relationships as we seek to establish trust and respect through considerate engagement with Indigenous groups on whose traditional lands we work across North America.

Working with landowners

100,000 landowner
relationships

TC Energy builds, operates and maintains assets that last generations, so we approach our relationships with landowners who may be affected by our activities with the long term in mind. We are proud of the positive relationships we continue to build and maintain with close to 100,000 landowners and know that these relationships are critical to our success.

Community investment

\$22 million+ invested in 1,660+
non-profits in 2018

With operations spanning Canada, the U.S. and Mexico, investing in and giving back to the communities where we operate are important parts of being a good neighbour, a trusted community partner and an employer of choice.

Indicator	Standards	2014	2015	2016	2017	2018
Economic benefits to communities¹² (CAD\$ M, unless otherwise indicated)						
Property taxes	GRI 201-1	473	517	555	569	569
Cash taxes paid, net of refunds	GRI 201-1	109	162	105	247	338
Total payroll costs ¹³	GRI 201-1	-	1,091	1,468.3	1,244.2	1,227.0
Canada	GRI 201-1	-	699.9	636.6	688.3	678.4
U.S. (US\$ M)	GRI 201-1	-	261.8	604.6	418.0	377.4
Mexico (MXN\$ M)	GRI 201-1	-	368.0	307.0	483.7	486.7
Employee benefits ¹⁴	GRI 201-1	-	180.8	236.8	200.3	292.2
Canada	GRI 201-1	-	98.7	84.8	82.7	132.5
U.S. (US\$ M)	GRI 201-1	-	58.7	112.5	92.6	115.6
Mexico (MXN\$ M)	GRI 201-1	-	14.1	15.8	26.5	28.2

Indicator	Standards	2014	2015	2016	2017	2018
Direct economic value generated and distributed (CAD\$ M, unless otherwise indicated)						
Direct economic value generated	GRI 201-1	-	11,353	12,547	13,449	13,679.0
Direct economic value distributed ¹⁵	GRI 201-1	-	6,905	8,072	8,689	8,829.9
Plant operating costs, employee wages and benefits, and others	GRI 201-1	-	3,250	3,819	3,906	3,591.0
Payments to providers of capital	GRI 201-1	-	2,908	3,534	3,952	4,308.0
Payments to government	GRI 201-1	-	679	660	816	907
Community investment	GRI 201-1	-	14.7	16.6	15	23.9
Direct economic value retained	GRI 201-1	-	4,448	4,475	4,760	4,849

Indicator	Standards	2014	2015	2016	2017	2018
Indigenous spending						
Total direct Indigenous spend (CAD \$M) ¹⁶	GRI 201-1 SASB EM-EP-210a.3	-	-	53.80	17.74	18.1
Indigenous* direct spend (CAD \$M)	GRI 201-1 SASB EM-EP-210a.3	-	-	35.50	17.70	8.6
Native American** direct spend (CAD \$M) ¹⁷	GRI 201-1 SASB EM-EP-210a.3	-	-	18.30	0.04	9.49
Total indirect Indigenous spend (CAD \$M) ¹⁸	GRI 201-1 SASB EM-EP-210a.3	-	-	106.30	57.76	160.5
Indigenous* indirect spend (CAD \$M)	GRI 201-1 SASB EM-EP-210a.3	-	-	106.30	57.75	151.0
Native American** indirect spend (CAD \$M) ¹⁹	GRI 201-1 SASB EM-EP-210a.3	-	-	0.03	0.01	9.52

Note: This indicator is inclusive of all TC Energy operations and assets, excluding the CPG assets.

**Indicates Canada*

***Indicates U.S.*

Indicator	Standards	2014	2015	2016	2017	2018
Local community engagement plans						
Percentage of operations with local community engagement, impact assessments, and development programs (%)	GRI 413-1	-	-	100	100	100
Community investment						
Direct community investment (CAD\$ M)	GRI 201-1	14.6	14.7	16.6	15.1	23.9
Community investments by motivation (% of total)	GRI 201-1	-	-	-		
Social investments ²⁰	GRI 201-1	-	39	48	38.0	68.0
Commercial investments ²¹	GRI 201-1	-	11	12	8.0	7.0
Philanthropic investments ²²	GRI 201-1	-	50	40	54.0	25.0
In-kind giving (CAD\$ M) ²³	GRI 201-1	-	0.34	0.14	2.3	0.2
Community investment incl. funds leveraged through outside sources (CAD\$ M) ²⁴	GRI 201-1	20.6	20.4	21.9	17.0	27.6
Investments as a percentage of total revenue (%)	GRI 201-1	0.14	0.15	0.13	0.11	0.19

Note: As part of our membership with the London Benchmarking Group, this performance data has been assured by an external third party.

Indicator	Standards	2014	2015	2016	2017	2018
Employee giving and volunteering						
Employee and contractor donations (CAD\$ M)	GRI 201-1	-	0.76	0.77	0.88	0.91
Company donations matching employee and contractor donations (CAD\$ M)	GRI 201-1	-	1.81	2.03	2.15	2.43
Volunteer hours logged by employees and contractors (# of hours)	GRI 201-1	11,553	9,151	11,452	15,826	26,486
During non-paid time (#)	GRI 201-1	-	7,531	8,666	12,885	22,048
During paid time (#)	GRI 201-1	-	1,620	2,786	2,941	4,439
Value of volunteer hours during paid work time (CAD\$)	GRI 201-1	-	76,228	131,089	138,385	227,887
Employment						
Full-time employees (#)	GRI 102-8	6,059	5,512	7,147	6,771	7,094
Canada	GRI 102-8	4,010	3,603	3,374	3,390	3,550
U.S.	GRI 102-8	1,914	1,757	3,563	3,112	3,269
Mexico	GRI 102-8	135	152	210	269	275
Contract professionals (#)	GRI 102-8	2,930	2,453	3,586	3,252	4,348
Canada	GRI 102-8	2,362	1,896	1,857	1,757	2,190
U.S.	GRI 102-8	307	271	1,312	958	1,744
Mexico	GRI 102-8	261	286	417	537	414

Indicator	Standards	2014	2015	2016	2017	2018
Employees represented by independent trade union or covered by collective bargaining agreements (%)	GRI 102-41	4.3	4.7	5.1	4.6	4.6
New hires and employee turnover						
New hire employees (#)	GRI 401-1	927	385	302	751	899
Canada	GRI 401-1	726	226	147	281	402
U.S.	GRI 401-1	154	125	117	385	428
Mexico	GRI 401-1	47	34	38	85	69
New hire employees by age group (%)	GRI 401-1					
< 30 years of age	GRI 401-1	33.0	33.0	57.0	26.0	27.0
30 - 50 years of age	GRI 401-1	58.0	57.0	57.3	65.0	62.0
> 50 years of age	GRI 401-1	9.0	10.0	16.2	9.0	11.0
New hire employees by gender (%)	GRI 401-1					
Female	GRI 401-1	37.0	30.0	30.0	26.0	31.0
Male	GRI 401-1	63.0	70.0	70.0	74.0	69.0
Employee total turnover rate (%)	GRI 401-1	7.5	17.4	11.6	15.0	7.0
Employee voluntary turnover rate (%) ²⁵	GRI 401-1	4.1	5.1	3.6	4.0	5.0
Employee involuntary turnover rate (%) ²⁶	GRI 401-1	3.4	12.3	8.0	11.0	2.0

Indicator	Standards	2014	2015	2016	2017	2018
Employee total turnover rate by region (%)	GRI 401-1					
Canada	GRI 401-1	67.0	71.0	60.0	24.0	46.0
U.S.	GRI 401-1	30.0	26.0	36.0	74.0	49.0
Mexico	GRI 401-1	3.0	3.0	4.0	2.0	5.0
Employee turnover by age group (%)	GRI 401-1					
< 30 years of age	GRI 401-1	16.0	9.0	7.9	8.0	10.0
30 - 50 years of age	GRI 401-1	44.0	46.0	46.1	46.0	51.0
> 50 years of age	GRI 401-1	40.0	45.0	46.1	46.0	39.0
Employee turnover by gender (%)	GRI 401-1					
Female	GRI 401-1	27.0	35.0	30.0	25.0	31.0
Male	GRI 401-1	73.0	65.0	70.0	75.00	69.00

Indicator	Standards	2014	2015	2016	2017	2018
Diversity of governance bodies and employees²⁷						
Women in workforce (%)	GRI 102-8	31.5	30.5	27.5	28.0	28.0
Full-time employees	GRI 102-8	31.5	30.5	27.5	28.0	28.0
Contractors	GRI 102-8	35.8	31.8	28.2	27.4	23.0
Diversity of governance bodies (% of total board members)	GRI 405-1					
Gender	GRI 405-1					
Women	GRI 405-1	23.1	30.0	30.0	23.1	25.0
Men	GRI 405-1	76.9	70.0	70.0	76.9	75.0
Age	GRI 405-1					
< 30 years of age	GRI 405-1	0.0	0.0	0.0	0.0	0.0
30 - 50 years of age	GRI 405-1	0.0	0.0	0.0	0.0	0.0
> 50 years of age	GRI 405-1	100.0	100.0	100.0	100.0	100.0

Indicator	Standards	2014	2015	2016	2017	2018
Diversity of executive management (%) ²⁸	GRI 405-1					
Gender	GRI 405-1					
Women	GRI 405-1	22.2	22.2	25.0	25.0	33.0
Men	GRI 405-1	77.8	77.8	75.0	75.0	67.0
Age	GRI 405-1					
< 30 years of age	GRI 405-1	0.0	0.0	0.0	0.0	0.0
30 - 50 years of age	GRI 405-1	11.1	11.1	0.0	0.0	0.0
> 50 years of age	GRI 405-1	88.9	88.9	100.0	100.0	100.0
Diversity of top management (%) ²⁹	GRI 405-1					
Gender	GRI 405-1					
Women	GRI 405-1	13.6	14.8	16.7	21.2	25.0
Men	GRI 405-1	86.5	85.2	83.3	77.2	75.0
Age	GRI 405-1					
< 30 years of age	GRI 405-1	0.0	0.0	0.0	0.7	0.0
30 - 50 years of age	GRI 405-1	47.5	35.1	60.5	61.5	52.1
> 50 years of age	GRI 405-1	52.5	64.9	39.5	37.8	47.9

Indicator	Standards	2014	2015	2016	2017	2018
Diversity of junior management (%) ³⁰	GRI 405-1					
Gender	GRI 405-1					
Women	GRI 405-1	23.2	23.5	23.9	25.8	26.9
Men	GRI 405-1	76.8	76.5	76.1	74.2	73.1
Age	GRI 405-1					
< 30 years of age	GRI 405-1	0.0	0.0	0.0	0.3	0.3
30 - 50 years of age	GRI 405-1	56.2	62.2	60.5	63.4	58.2
> 50 years of age	GRI 405-1	43.8	37.8	39.5	35.2	41.5
Diversity of non-management (%) ³¹	GRI 405-1					
Gender	GRI 405-1					
Women	GRI 405-1	32.9	31.6	28.0	27.3	28.4
Men	GRI 405-1	67.1	68.4	72.0	72.7	71.6
Age	GRI 405-1					
< 30 years of age	GRI 405-1	15.9	15.7	13.5	12.4	13.6
30 - 50 years of age	GRI 405-1	56.1	54.7	55.7	58.4	60.6
> 50 years of age	GRI 405-1	28.0	29.6	30.8	29.2	25.8

Indicator	Standards	2014	2015	2016	2017	2018
Canadian diversity analysis (%)	GRI 405-1					
Women	GRI 405-1	37.3	36.6	36.5	36.3	36.6
Indigenous	GRI 405-1	1.8	2.5	2.4	2.4	2.5
Persons with disabilities	GRI 405-1	2.0	3.4	3.2	3.1	3.4
Visible minorities (excl. Indigenous)	GRI 405-1	18.7	20.6	20.6	21.7	21.0
American diversity analysis (%)	GRI 405-1					
Women	GRI 405-1	19.3	18.3	18.7	18.7	18.6
Minorities (incl. American Indians/Alaska Natives)	GRI 405-1	19.0	19.6	13.5	13.1	13.3
Individuals with disabilities	GRI 405-1	1.2	3.1	2.1	2.1	2.6
Veterans	GRI 405-1	9.7	10.5	7.1	6.4	6.2
Mexico diversity analysis (%)	GRI 405-1					
Women	GRI 405-1	29.5	28.3	30.1	27.5	30.2

Note: 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 do track and voluntarily report Mexico gender workforce representation.

Indicator	Standards	2014	2015	2016	2017	2018
Occupational health and safety						
Employees	GRI 403-2	-	-	-	-	-
Fatalities (#)	GRI 403-2 SASB EM-EP-320a.1	0	0	0	1	0
Canada	GRI 403-2 SASB EM-EP-320a.1	-	-	-	0	0
U.S.	GRI 403-2 SASB EM-EP-320a.1	-	-	-	1	0
Mexico	GRI 403-2 SASB EM-EP-320a.1	-	-	-	0	0
Total recordable case rate ³²	GRI 403-2 SASB EM-EP-320a.1	0.59	0.61	0.90	0.59	0.58
Canada (# of recordable cases)	GRI 403-2 SASB EM-EP-320a.1	-	-	-	17	17
U.S. (# of recordable cases)	GRI 403-2 SASB EM-EP-320a.1	-	-	-	22	19
Mexico (# of recordable cases)	GRI 403-2 SASB EM-EP-320a.1	-	-	-	1	3
Away from work case rate ³³	GRI 403-2	0.16	0.27	0.25	0.19	0.16
Canada (# of away from work cases)	GRI 403-2	-	-	-	1	7
U.S. (# of away from work cases)	GRI 403-2	-	-	-	12	4
Mexico (# of away from work cases)	GRI 403-2	-	-	-	0	0

Indicator	Standards	2014	2015	2016	2017	2018
Vehicle incident frequency rate ³⁴	n/a	1.63	2.01	1.07	2.07	1.84
High potential incidents rate ³⁵	n/a	0.18	0.11	0.28	0.16	0.42
Absentee rate	GRI 403-2	-	-	-		
Casual absences ³⁶ (average monthly rate)	GRI 403-2	-	-	2.05	1.89	1.84
Short term disability (STD) ³⁷ (average monthly rate)	GRI 403-2	-	-	2.33	2.51	2.15
Workers Compensation (WCB) ³⁸ (average monthly rate)	GRI 403-2	-	-	0.13	0.09	0.07
Occupational disease rate	GRI 403-2	-	-			
Canada	GRI 403-2	-	-			
U.S.	GRI 403-2	-	-			
Mexico	GRI 403-2	-	-			
Average lost days per person ³⁹ (annual rate)	GRI 403-2	-	-	4.51	4.49	4.06

Indicator	Standards	2014	2015	2016	2017	2018
Contractors	GRI 403-2	-	-	-		
Fatalities (#)	GRI 403-2 SASB EM-EP-320a.1	-	0	0	0	0
Canada	GRI 403-2 SASB EM-EP-320a.1	-	-	-	0	0
U.S.	GRI 403-2 SASB EM-EP-320a.1	-	-	-	0	0
Mexico	GRI 403-2 SASB EM-EP-320a.1	-	-	-	0	0
Total recordable case rate ³²	GRI 403-2 SASB EM-EP-320a.1	1.32	1.17	1.38	0.95	0.99
Canada	GRI 403-2 SASB EM-EP-320a.1	-	-	-	74	91
U.S.	GRI 403-2 SASB EM-EP-320a.1	-	-	-	68	97
Mexico	GRI 403-2 SASB EM-EP-320a.1	-	-	-	32	33
Away from work case rate ³³	GRI 403-2	0.19	0.15	0.13	0.1	0.15
Canada	GRI 403-2	-	-	-	4	2
U.S.	GRI 403-2	-	-	-	10	26
Mexico	GRI 403-2	-	-	-	4	5
Vehicle incident frequency rate ³⁴	SASB EM-EP-320a.1	2.51	3.01	2.52	2.45	2.41
High potential incidents rate ³⁵	SASB EM-EP-320a.1	0.47	0.63	0.49	0.55	0.93



Leadership and Governance

We recognize that everyone – from the Board of Directors, to management, to employees – has a role to play in risk management. TC Energy's Board and its committees are responsible for risk oversight and the Governance Committee of the Board is responsible for overseeing TC Energy's Enterprise Risk Management (ERM) Framework which provides management systems and processes for identification, evaluation, prioritization, mitigation and monitoring of risk.

Other Board committees oversee TC Energy's management of specific types of risk. For instance, the HSSE Committee monitors risk management for health, safety, sustainability and environmental risks. Figure 1 shows our company's overarching governance and risk-management structure.

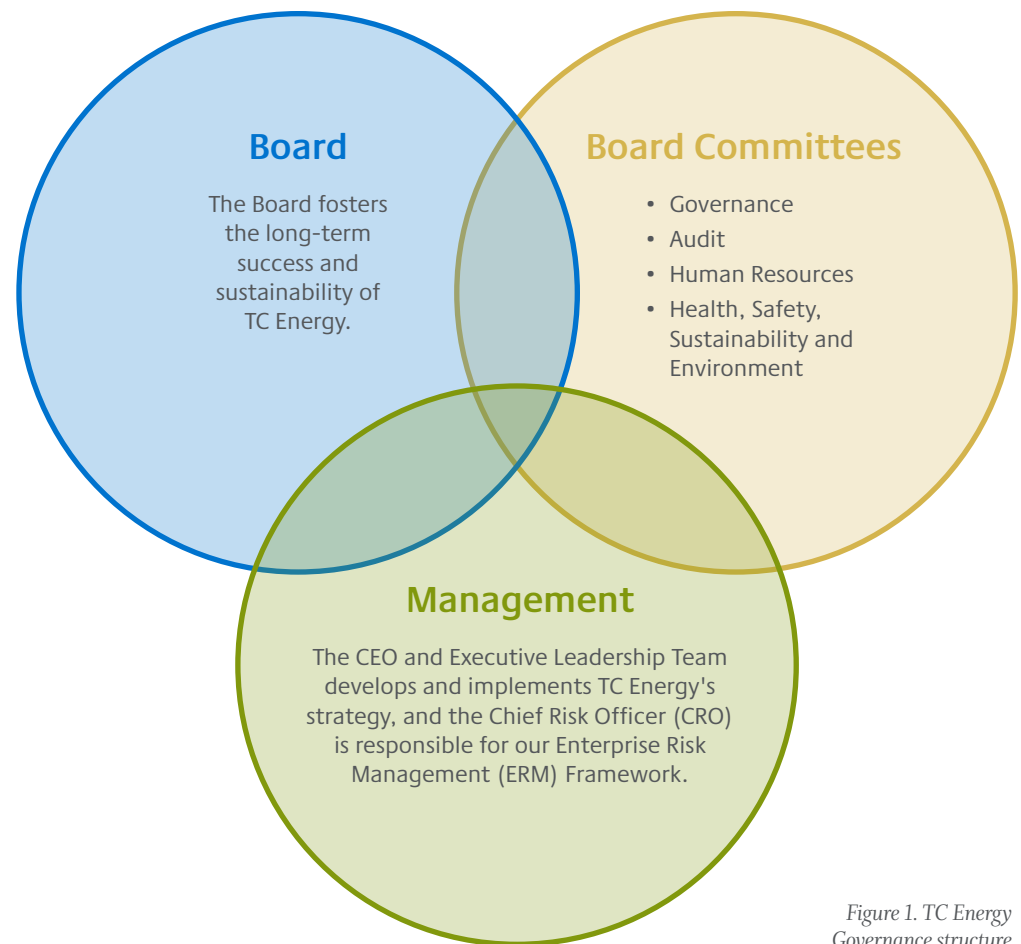


Figure 1. TC Energy Governance structure

Indicator	Standards	2014	2015	2016	2017	2018
Governance						
Size of Board of Directors (#)	n/a	11	12	13	13	12
Independent directors (%)	n/a	91	92	92	92	92
Women on Board (%)	n/a	27	25	23	23	25
Board Diversity policy	n/a	No	No	Yes	Yes + 30% target	Yes + 30% target
Number of board interlocks	n/a	0	0	0	0	0
External board service limits for independent directors	n/a	6 public company boards in total	6 public company boards in total	6 public company boards in total	4 public company boards in total	4 public company boards in total
Average director age	n/a	63	63	62	63	62
All committees independent	n/a	Yes	Yes	Yes	Yes	Yes
Annual director elections	n/a	Yes	Yes	Yes	Yes	Yes
Individual director elections	n/a	Yes	Yes	Yes	Yes	Yes
Majority voting policy	n/a	Yes	Yes	Yes	Yes	Yes
Independent executive compensation consultant	n/a	Yes	Yes	Yes	Yes	Yes
Clawback policy	n/a	Yes	Yes	Yes	Yes	Yes
Double-trigger vesting on change of control	n/a	Yes	Yes	Yes	Yes	Yes

Indicator	Standards	2014	2015	2016	2017	2018
Separate chair and CEO	n/a	Yes	Yes	Yes	Yes	Yes
Director retirement age ⁴⁰	n/a	70	70	70	70	70
Director share ownership requirements	n/a	4x retainer	4x retainer	4x retainer	4x retainer	4x retainer
Executive share ownership requirements	n/a	5x (CEO), 2x (other named executives)	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)
CEO share ownership post-retirement hold period	n/a	-	-	-	-	1 year
In-camera sessions at every Board and committee meeting	n/a	Yes	Yes	Yes	Yes	Yes
Annual say on pay	n/a	Yes	Yes	Yes	Yes	Yes
Code of business ethics	n/a	Yes	Yes	Yes	Yes	Yes
Board, committee and director evaluations annually	n/a	Yes	Yes	Yes	Yes	Yes
Board orientation and education program	n/a	Yes	Yes	Yes	Yes	Yes

Investing in safety

\$1 billion+ invested in integrity

Our pipelines, oil and gas facilities and power plants are some of the most technologically advanced in the industry. One way we manage the safety of our assets is through integrity and preventative maintenance programs. We invested more than \$1 billion in these programs in 2018.

Prepared for emergencies

193 training exercises

Ensuring we are prepared for the unlikely event of an emergency is also part of our commitment to safety. By working with our communities through regular emergency drills and exercises, we build relationships with local first responders and community officials to achieve co-ordinated and effective response. In 2018 we completed 193 emergency drills and exercises.

A culture of safety

9 Life Saving Rules

The Life Saving Rules guide the way our employees and contractors work, and help us hold each other accountable to the highest possible safety standards. They were created to highlight the high-risk activities that are part of the work we do every day and emphasize the importance of following measures we have in place to manage them.

Safety 24/7

Delivering energy safely is our top value.

Our goal is to ensure that the public, our employees and the environment aren't affected by an incident involving our assets. We are proud to have safety records that are among the best in the industry but we believe that no safety related incidents are acceptable and continue to work towards our goal of zero incidents. Parts of our company have achieved zero incidents for decades and we are focused on achieving that level of performance across every area in our organization.

Our commitment to safety isn't just a mantra – it's how we work 24/7, 365 days a year. By reinforcing a disciplined set of rules and providing rigorous training, we aim to ensure all of our employees and contractors make it home safely every day.

Adding “ears” to pipeline monitoring

From control centre operators, detailed maintenance and inspection programs, and regular ground and air patrols, there are a lot of eyes to ensure our pipelines safely deliver the natural gas and oil that fuels our society. With HiFi Engineering's new fiber optic technology currently piloted on parts of our Keystone Pipeline System, we now also have “ears” on pipeline monitoring.

Fiber optic lines run the length of pipe sections to provide an additional layer of safety. With data processed at the speed of light, the fiber optic lines can report changes in pipeline sound, movement and temperature that could result from natural events, such as earthquakes, or man-made impacts, such as construction.

This innovative technology adds another layer to our comprehensive pipeline monitoring and leak detection program.

Indicator	Standards	2014	2015	2016	2017	2018
Emergency preparedness and response exercises						
Total exercises completed (#)	SASB EM-EP-320a.1	113	125	117	172	196
Annual field exercises	SASB EM-EP-320a.1	22	22	22	23	26
Field tabletop exercises ⁴¹	SASB EM-EP-320a.1	61	67	64	116	139
Equipment deployment exercises	SASB EM-EP-320a.1	10	10	10	12	11
Calgary, Houston & Mexico support department tabletop exercises	SASB EM-EP-320a.1	19	26	21	21	20
Emergency preparedness and response training						
First Responders training (#) ⁴²	SASB EM-EP-320a.1	-	-	-	253	510
Best practice training (Incident Command System) (#) ^{43,44}	SASB EM-EP-320a.1	2,576	2,364	2,537	2,548	3,387
Regulatory training (HAZWOPER) ⁴⁵	SASB EM-EP-320a.1	532	446	404	348	433

Informed by *SASB Critical Incident Risk Management General Issue Category

Indicator	Standards	2014	2015	2016	2017	2018
Investment in integrity programs						
Investment for natural gas and liquids pipelines (CAD\$ B)	SASB EM-MD-540a.4	0.55	0.80	0.81	1.06	1.30
Third-party damage						
Unauthorized excavations per 1,000km of ROW (#) ⁴⁶	SASB EM-MD-540a.4	1.34	1.50	1.28	1.68	1.46
One Calls per km of ROW (#) ⁴⁷	SASB EM-MD-540a.4	2.91	2.76	2.56	5.81	6.62
Unauthorized Pipeline Encroachments per 1,000km of ROW (#) ⁴⁸	SASB EM-MD-540a.4	3.30	3.90	4.62	3.93	3.42
In-line inspections						
Number of In-line Inspections	SASB EM-MD-540a.2	-	146	201	277	279
Canada	SASB EM-MD-540a.2	-	90	88	169	149
Gas	SASB EM-MD-540a.2	-	86	87	162	131
Liquid	SASB EM-MD-540a.2	-	4	1	7	18
U.S.	SASB EM-MD-540a.2	-	53	113	108	130
Gas	SASB EM-MD-540a.2	-	43	111	93	112
Liquid	SASB EM-MD-540a.2	-	10	2	15	18
Mexico	SASB EM-MD-540a.2	-	3	0	0	0
Gas	SASB EM-MD-540a.2	-	3	0	0	0

Indicator	Standards	2014	2015	2016	2017	2018
In-line inspections (km/mi)	SASB EM-MD-540.a.2	-	12,958 km/ 8,056 mi	18,074 km/ 11,233 mi	21,914 km/ 13,620 mi	22,071 km/ 13,729 mi
Canada	SASB EM-MD-540.a.2	-	6,392 km/ 3,971 mi	10,715 km/ 6,661 mi		
Gas	SASB EM-MD-540.a.2	-	5,243 km/ 3,257 mi	10,400 km/ 6,465 mi	11,232 km/ 6,981 mi	8,530 km/ 5,301 mi
Liquid	SASB EM-MD-540.a.2	-	1,149 km/ 714 mi	315 km/ 196 mi	2,074 km/ 1,289 mi	3,220 km/ 2,001 mi
U.S.	SASB EM-MD-540.a.2	-	6,219 km/ 3,963 mi	7,359 km/ 4,574 mi		
Gas	SASB EM-MD-540.a.2	-	3,759 km/ 2,335 mi	6,257 km/ 3,889 mi	4,565 km/ 2,837 mi	5,540 km/ 3,443 mi
Liquid	SASB EM-MD-540.a.2	-	2,460 km/ 1,528 mi	1,102 km/ 685 mi	4,043 km/ 2,513 mi	4,801 km/ 2,984 mi
Mexico	SASB EM-MD-540.a.2	-	357 km/ 222 mi	0 km/0 mi	0 km/0 mi	0 km/0 mi
Gas	SASB EM-MD-540.a.2	-	357 km/ 222 mi	0 km/0 mi	0 km/0 mi	0 km/0 mi

Note: For investment in integrity programs and third-party damage indicators, discussion of management systems used to integrate a culture of safety and emergency preparedness can be found in the 'Integrity of pipelines and facilities' section of our 2017 Corporate Responsibility Report.

Indicator	Standards	2014	2015	2016	2017	2018
Integrity digs						
Completed integrity digs (#)	n/a	-	724	799	936	1133
Canada	n/a	-	639	547	726	853
Gas	n/a	-	618	545	716	844
Liquid	n/a	-	21	2	10	9
U.S.	n/a	-	85	249	209	275
Gas	n/a	-	73	235	196	257
Liquid	n/a	-	12	14	13	18
Mexico	n/a	-	0	3	1	5
Gas	n/a	-	0	3	1	5

Indicator	Standards	2014	2015	2016	2017	2018
Reportable gas releases from natural gas pipelines and facilities						
Number of reportable releases (#) ⁴⁹	GRI 306-3 SASB EM-MD-540a.1	-	-	31	37	47
Canada	GRI 306-3 SASB EM-MD-540a.1	-	-	14	22	15
U.S.	GRI 306-3 SASB EM-MD-540a.1	-	-	8	8	13
Mexico	GRI 306-3 SASB EM-MD-540a.1	-	-	9	7	9
Volume of reportable releases (cubic metres) ⁵⁰	GRI 306-3	-	-	2,252,447	4,538,083	2,222,034
Canada	GRI 306-3	-	-	3,131	265,032	457,191
U.S.	GRI 306-3	-	-	2,170,995	4,211,892	1,688,069
Mexico	GRI 306-3	-	-	78,321	61,159	76,774

Indicator	Standards	2014	2015	2016	2017	2018
Reportable crude oil spills from pipelines and facilities						
Total number of reportable spills (#) ⁵¹	GRI 306-3 SASB EM-MD-160a.4	10	1	2	2	2
Canada	GRI 306-3 SASB EM-MD-160a.4	9	1	0	1	1
U.S.	GRI 306-3 SASB EM-MD-160a.4	1	0	2	1	1
Total volume of reportable spills (barrels) ⁵²	GRI 306-3 SASB EM-MD-160a.4	1.88	14.47	400.12	9,731.45	0.63
Canada	GRI 306-3 SASB EM-MD-160a.4	0.38	14.47	0	31.45	0.00
U.S.	GRI 306-3 SASB EM-MD-160a.4	1.50	0	400.12	9,700.00	0.63
Process safety events						
Number of pipeline ruptures (#) ⁵³	GRI OG13(a) SASB EM-MD-540a.1	3	1	0	1	2
Natural gas pipeline ruptures	GRI OG13(a) SASB EM-MD-540a.1	3	1	0	0	2
Liquids pipeline ruptures	GRI OG13(a) SASB EM-MD-540a.1	0	0	0	1	0
Number of liquid leaks of > 5 barrels from pipelines and facilities (#) ⁵⁴	GRI OG13(a) SASB EM-MD-540a.1	0	0	1	0	1
Number of significant natural gas leaks from pipelines and facilities (#) ⁵⁵	GRI OG13(a) SASB EM-MD-540a.1	4	10	7	1	2

Indicator	Standards	2014	2015	2016	2017	2018
Political Contributions						
Political contributions made by TC Energy Corporation (CAD \$)	GRI 415-1	10,185	155,770	111,585	41,963	89,390
Canada	GRI 415-1	5,521	69,395	54,350	22,500	5,150
US ⁵⁶	GRI 415-1	1,743	86,375	57,235	19,463	84,240
Political contributions made by TC Energy subsidiaries	GRI 415-1					
US ^{57,58}	GRI 415-1	1,715	8,500	86,050	392,753	274,495
Environmental fines (\$ in currency indicated)						
Power operations	GRI 307-1 SASB EM-MD-520a.1	1,000 US\$	0	11,000 US\$	0	0
Gas and gas storage operations	GRI 307-1 SASB EM-MD-520a.1	0	15,500 US\$	1,750 US\$	5,000 US\$	0
Liquids pipeline operations	GRI 307-1 SASB EM-MD-520a.1	0	0	0	0	0
Project development ⁵⁹	GRI 307-1 SASB EM-MD-520a.1	0	5,000 CAD\$	19,500 US\$	0	135,340 US\$

Footnotes

Environment

1. TC Energy calculates its direct GHG emissions using a combination of methods required by various regulations in different jurisdictions. We report our emissions to British Columbia, Alberta, Ontario, Québec, Environment and Climate Change Canada, the U.S. Environmental Protection Agency (EPA), California, Oregon, Washington and Mexico's Ministry of Environment and Natural Resources (SEMARNAT). These calculation methods can include direct measurement and emission factors in conjunction with operating conditions. Emissions are estimated for vented and fugitive emissions and based on assumptions about operations using experienced staff with direct operational knowledge, including, for example, estimated fuel consumption.

- CO₂, methane, SF₆ and nitrous oxide are included in Scope 1 emissions.
- CO₂ emissions are calculated based on fuel gas measurements at pipeline and power generation facilities.
- Methane emissions are calculated using field reports for blowdowns and emission factors for calculating fugitive emissions.
- Nitrous oxide is calculated based on engine-specific emissions factors.

The global warming potentials are based on IPCC assessments.

2. The relationship between natural gas transmission pipeline GHG emissions and the volume of gas transported is complex. Comparisons of emissions intensities between natural gas transmission pipeline systems must consider the type of pipeline network and the service that it is providing.

3. Many of TC Energy's electricity generating facilities 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.

4. Air quality emissions data includes only Canada as reported to the National Pollutant Release Inventory.

5. Emissions expenses include carbon pricing programs in jurisdictions: British Columbia, Alberta, Ontario, and Quebec in Canada and Regional Greenhouse Gas Initiative, and California in the U.S.

6. Total volume of water taken is defined as water used for hydrostatic testing, and is reported only for Hydrostatic Testing for Canadian Pipelines and does not include tanks.

7. Total power water consumption in 2018 is inclusive of all TC Energy operations and assets, including:

- | | | |
|---------------------|--------------|----------------|
| • Ocean State Power | • Redwater | • Halton Hills |
| • Coolidge | • Bear Creek | • Becancour |
| • Ravenswood | • Carseland | |

Total power water consumption in 2018 excludes the following operations and assets:

- Once-through cooling water
- NE Hydro
- Mackay River

8. 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.

9. 2018 data includes operations, project and remediation waste for the TC Energy operated assets. The 2017 & 2018 dataset does not include: Canadian CER regulated TC Energy operated assets including TQM, Canadian Mainline, Foothills Pipeline, NGTL System, and Keystone Canada; and Canada & U.S. power assets, and Mexico assets.

10. The quantities include hazardous and non-hazardous waste as well as both solids and liquids. Data does not include general trash, pipeline liquids and materials managed as off-specification/recoverable fuels, parts washers, universal waste and any other waste stream that went for recycling.

11. Total waste generated increased in 2018 due to the inclusion of Keystone Pipeline (US) and the addition of our AER regulated oil tank terminals and oil pipelines assets in Alberta, Canada that became fully operational in 2018. Keystone (US) data was not reflected in the 2017 dataset and accounts for 40% of the waste in the 2018 dataset.

Social and Human Capital

12. For total payroll costs and total employee benefits we have applied 12/31/2018 Bank of Canada Exchange Rate USD to CAD 1.3642, MXN to CAD 0.06942.

13. Total payroll costs are based on T4 Box 14 of Salaried, Hourly and Board of Directors, W2 Box 1, and Constancia de Percepciones for Canadian, U.S., and Mexican core employees.

14. 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.

15. 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.

16. TC Energy defines direct spend as spend with prime/general suppliers.

17. CAD currency conversion exchange rate: \$1 USD: 1.3364 CAD (April 4, 2019)

18. TC Energy defines indirect spend as prime/general suppliers' spend on labour, subcontractors, materials and expenses.

19. CAD currency conversion exchange rate: \$1 USD: 1.3364 CAD (April 4, 2019)

20. 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.

21. TC Energy defines commercial investments as activities in the community that directly support our business objectives or that promote or protect our commercial interests.

22. TC Energy defines philanthropic investments as one-off or intermittent donations in response to charity appeals or in support of employee charitable activities.

23. TC Energy defines in-kind giving as donations of equipment or resources to support community programs.

24. 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.

25. Voluntary turnover includes employees who retired or resigned from employment at TC Energy.

26. Involuntary turnover includes divestitures, severances, discharges and layoffs.

27. 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.

28. Executive management at TC Energy includes Chief Executive officer (CEO) and Executive Leadership Team (ELT) roles, including Executive Vice Presidents.

29. Top management at TC Energy includes roles that are Executive level E1 and E2, including Senior Vice President and Vice President roles.

30. Junior management at TC Energy includes roles of M1 through M3.

31. 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.

Social and Human Capital continued...

32. 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.

33. 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.

34. 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.

35. 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.

36. 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.

37. 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.

38. 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.

39. 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.

Leadership and Governance

40. The Board may waive the director retirement policy in special circumstances or if a director has not yet served seven years on the Board by age 70.

41. Field tabletop exercises involve key personnel discussing simulated scenarios in an informal setting.

42. 2018 data includes training for Canadian Gas Operations (CGO), in addition to Canadian and US liquids assets. Years prior to 2018 exclude CGO data.

43. 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.

44. Best practice training in 2018 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.

45. 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.

46. 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.

47. 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 received via telephone or online.

48. TC Energy defines unauthorized encroachments as those that include activities carried out without authorization from local one-call centres.

49. 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.

50. Reporting thresholds are variable depending on jurisdiction and therefore releases are not wholly comparable by jurisdiction or year over year.

51. 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.

52. Historical data for 2016 and prior has been converted from litres to barrels. The conversion factor used is 1 litre = 0.006289811 barrel.

53. TC Energy defines a rupture as an unplanned, uncontrolled release of liquid that immediately impacts the serviceability of the pipeline.

54. TC Energy defines a leak as an unplanned, uncontrolled release of liquid that does not immediately impact the serviceability of the pipeline.

55. 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)

56. 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.

57. 2018 USD converted to CAD using exchange rate of 1 USD = 1.3 CAD. US political contributions and PAC disbursements are provided in USD for historical data in 2014, 2015, and 2016.

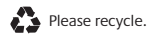
58. The TC Energy PAC is a separate segregated fund (SSF) under US federal election law, not a subsidiary. TC Energy USA Services PAC is a connected political action committee to TC Energy Corporation, which means TC Energy can pay for its administrative costs but cannot directly deposit any funds into it.

59. Two fines related to project development were issued in 2018:

- A fine in the amount of \$122,000 was issued for the Mountaineer Xpress project, related to the maintenance of required erosion control devices at locations along the project.
- A fine in the amount of \$13,340 was issued for the WB Xpress Project, related to the installation of a required control device at one location along the project.

MEMBER OF
Dow Jones
Sustainability Indices
In Collaboration with RobecoSAM

2018 THOMSON REUTERS
TOP100
GLOBAL TECH LEADER



[TCEnergy.com](https://www.tceenergy.com)

Updated as at April 27, 2020

