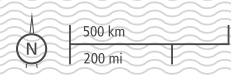
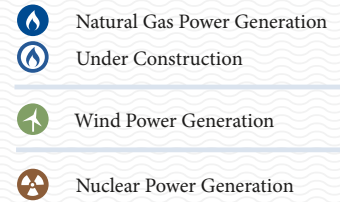
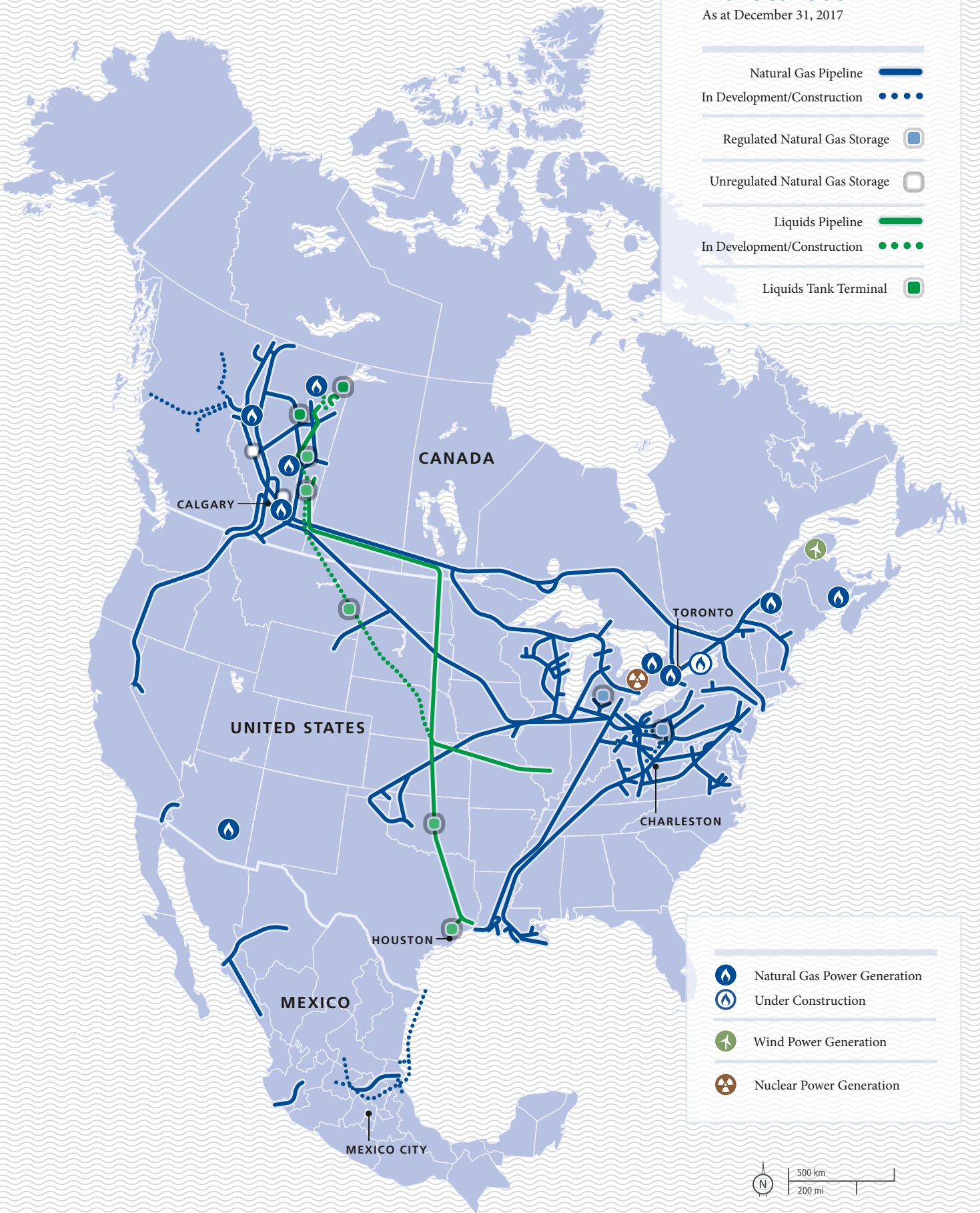
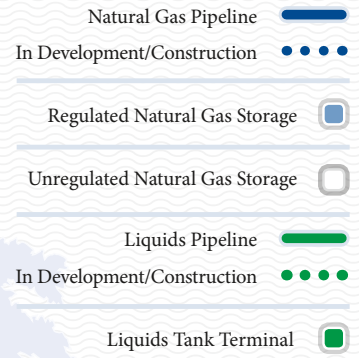


# TransCanada

As at December 31, 2017









# TransCanada Today

As at December 31, 2017



## Natural Gas Pipelines

We are the operator of all of the following natural gas pipelines and regulated natural gas storage assets except for Iroquois.









		Length	Description	Effective Ownership
<b>Canadian pipelines</b>				
NGTL System		24,320 km (15,112 miles)	Receives, transports and delivers natural gas within Alberta and B.C., and connects with the Canadian Mainline, Foothills system and third-party pipelines.	100%
Canadian Mainline		14,077 km (8,747 miles)	Transports natural gas from the Alberta/Saskatchewan border and the Ontario/U.S. border to serve eastern Canada and interconnects to the U.S.	100%
Foothills		1,241 km (771 miles)	Transports natural gas from central Alberta to the U.S. border for export to the U.S. Midwest, Pacific Northwest, California and Nevada.	100%
Trans Québec & Maritimes (TQM)		572 km (355 miles)	Connects with the Canadian Mainline near the Ontario/Québec border to transport natural gas to the Montréal to Québec City corridor, and interconnects with the Portland pipeline system that serves the northeast U.S.	50%
Ventures LP		161 km (100 miles)	Transports natural gas to the oil sands region near Fort McMurray, Alberta. It also includes a 27 km (17 mile) pipeline supplying natural gas to a petrochemical complex at Joffre, Alberta.	100%
Great Lakes Canada		58 km (36 miles)	Transports natural gas from the Great Lakes system in the U.S. to Ontario, near Dawn, through a connection at the U.S. border underneath the St. Clair River.	100%









### Canadian unregulated natural gas storage 118 Bcf of non-regulated natural gas storage capacity

Results reported in our Energy segment in the 2016 Annual Report





Crossfield		68 Bcf	Underground facility connected to the NGTL System in Crossfield, Alberta.	100%
Edson		50 Bcf	Underground facility connected to the NGTL System near Edson, Alberta.	100%

### U.S. pipelines

ANR		15,109 km (9,388 miles)	Transports natural gas from various supply basins to markets throughout the Midwest and Gulf Coast.	100%
ANR Storage		250 Bcf	Provides regulated underground natural gas storage service from several facilities (not all shown) to customers in key mid-western markets.	
Bison		488 km (303 miles)	Transports natural gas from the Powder River Basin in Wyoming to Northern Border in North Dakota. We effectively own 25.7 per cent of the system through our interest in TC PipeLines, LP.	25.7%
Columbia Gas		18,113 km (11,255 miles)	Transports natural gas from supply primarily in the Appalachian Basin to markets throughout the U.S. Northeast.	100%
Columbia Storage		285 Bcf	Provides regulated underground natural gas storage service from several facilities (not all shown) to customers in key eastern markets. We also own a 50 per cent interest in the 12 Bcf Hardy Storage facility.	100%
Midstream**		295 km (185 miles)	Provides infrastructure between the producer upstream well-head and the downstream (interstate pipeline and distribution) sector and includes a 47.5 per cent interest in Pennant Midstream.	100%
Columbia Gulf		5,377 km (3,341 miles)	Transports natural gas to various markets and pipeline interconnects in the southern U.S. and Gulf Coast.	100%
Crossroads		325 km (202 miles)	Interstate natural gas pipeline operating in Indiana and Ohio with multiple interconnects to other pipelines.	100%


		Length	Description	Effective Ownership
Gas Transmission Northwest (GTN)		2,216 km (1,377 miles)	Transports WCSB and Rockies natural gas to Washington, Oregon and California. Connects with Tuscarora and Foothills. We effectively own 25.7 per cent of the system through our interest in TC PipeLines, LP.	25.7%
Great Lakes		3,404 km (2,115 miles)	Connects with the Canadian Mainline near Emerson, Manitoba and to Great Lakes Canada near St Clair, Ontario, plus interconnects with ANR at Crystal Falls and Farwell in Michigan, to transport natural gas to eastern Canada and the U.S. Upper Midwest. We effectively own 65.5 per cent of the system through the combination of our 53.6 per cent direct ownership interest and our 25.7 per cent interest in TC PipeLines, LP.	65.5%
Iroquois		669 km (416 miles)	Connects with the Canadian Mainline and serves markets in New York. We effectively own 13.4 per cent of the system through a 0.7 per cent direct ownership and our 25.7 per cent interest in TC PipeLines, LP.	13.4%
Millennium		407 km (253 miles)	Natural gas pipeline supplied by local production, storage fields and interconnecting upstream pipelines to serve markets along its route and to the U.S. Northeast.	47.5%
North Baja		138 km (86 miles)	Transports natural gas between Arizona and California, and connects with a third-party pipeline on the California/Mexico border. We effectively own 25.7 per cent of the system through our interest in TC PipeLines, LP.	25.7%
Northern Border		2,272 km (1,412 miles)	Transports WCSB, Bakken and Rockies natural gas from connections with Foothills and Bison to U.S. Midwest markets. We effectively own 12.9 per cent of the system through our 25.7 per cent interest in TC PipeLines, LP.	12.9%
Portland (PNGTS)		475 km (295 miles)	Connects with TQM near East Hereford, Québec to deliver natural gas to customers in the U.S. Northeast. We effectively own 15.9 per cent of the system through our 25.7 per cent interest in TC PipeLines, LP.	15.9%
Tuscarora		491 km (305 miles)	Transports natural gas from GTN at Malin, Oregon to markets in northeastern California and northwestern Nevada. We effectively own 25.7 per cent of the system through our interest in TC PipeLines, LP.	25.7%















## Mexican pipelines

Guadalajara		315 km (196 miles)	Transports natural gas from Manzanillo, Colima to Guadalajara, Jalisco.	100%
Mazatlán		430 km (267 miles)	Transports natural gas from El Oro to Mazatlán, Sinaloa in Mexico. Connects to the Topolobampo Pipeline at El Oro.	100%
Tamazunchale		375 km (233 miles)	Transports natural gas from Naranjos, Veracruz in east central Mexico to Tamazunchale, San Luis Potosi and on to El Sauz, Querétaro.	100%
Topolobampo		530 km (329 miles)	Transports natural gas to Topolobampo, Sinaloa, from interconnects with third-party pipelines in El Oro, Sinaloa and El Encino, Chihuahua in Mexico.	100%

## Under construction

### Canadian

NGTL 18 Facilities*		68 km** (42 miles)	An expansion program on the NGTL System including pipeline and compression additions with expected in-service dates by November 2018.	100%
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		Length	Description	Effective Ownership
<b>U.S. pipelines</b>				
Mountaineer XPress		275 km** (171 miles)	A Columbia Gas project designed to transport supply from the Marcellus and Utica shale plays to points along the system and to the Leach interconnect with Columbia Gulf.	100%
Leach XPress <sup>1</sup>		260 km** (160 miles)	A Columbia Gas project designed to transport supply from the Marcellus and Utica shale plays to points along the system and to an interconnect with Columbia Gulf.	100%
Cameron Access		55 km** (34 miles)	A Columbia Gulf project to deliver natural gas from points along the Columbia Gulf system to the Cameron LNG facility.	100%
WB XPress		47 km** (29 miles)	A Columbia Gas project designed to transport Marcellus supply both eastbound (to interconnects and mid-Atlantic markets) and westbound (to interconnect pipelines).	100%
Gulf XPress			A Columbia Gulf project associated with the Mountaineer XPress expansion and consisting of the addition of seven greenfield mid-point compressor stations along Columbia Gulf.	100%
<b>Mexican pipelines</b>				
Tula		300 km** (186 miles)	The pipeline will originate in Tuxpan in the state of Veracruz and extend through the states of Puebla and Hidalgo, supplying natural gas to CFE combined-cycle power generating facilities in each of those jurisdictions as well as to the central and western regions of Mexico.	100%
Villa de Reyes		420 km** (261 miles)	The pipeline will deliver natural gas from Tula, Hidalgo to Villa de Reyes, San Luis Potosi, connecting to the Tamazunchale and Tula pipelines.	100%
Sur de Texas		800 km* (497 miles)	The pipeline will begin offshore in the Gulf of Mexico at the border point near Brownsville, Texas and end in Tuxpan, in the state of Veracruz, connecting with the Tamazunchale and Tula pipelines.	60%
<b>Permitting and pre-construction phase</b>				
<b>Canadian pipelines</b>				
North Montney		206 km** (128 miles)	An extension of the NGTL System to receive natural gas from the North Montney gas producing region and connect to NGTL's existing Groundbirch Mainline.	100%
NGTL 2019 Facilities		138 km** (86 miles)	An expansion program on the NGTL System including multiple pipeline projects and compression additions with expected in-service dates by November 2019.	100%
NGTL 2020 Facilities		125 km** (78 miles)	An expansion program on the NGTL System including multiple pipeline projects and compression additions with expected in-service dates by November 2020.	100%
NGTL 2021 Facilities		401 km** (249 miles)	An expansion program on the NGTL System including multiple pipeline projects and compression additions with expected in-service dates by November 2021.	100%
<b>U.S. pipelines</b>				
Buckeye XPress		103 km** (64 miles)	A Columbia Gas project designed to upgrade and replace existing pipeline and compression facilities in Ohio to transport incremental supply from the Marcellus and Utica shale plays to points along the system.	100%
Portland XPress		N/A	A PNGTS project to expand the system through the construction of compression and related facilities at existing compressor stations.	15.9%

	Length	Description	Effective Ownership
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## In Development

### Canadian pipelines

Coastal GasLink	 670 km* (416 miles)	To deliver natural gas from the Montney gas producing region at an expected interconnect with the NGTL System near Dawson Creek, B.C. to LNG Canada's proposed facility near Kitimat, B.C.	100%
Merrick Mainline	 260 km* (161 miles)	To deliver natural gas from NGTL's existing Groundbirch Mainline near Dawson Creek, B.C. to its end point near the community of Summit Lake, B.C.	100%











1 Leach XPress was placed in service in January 2018.

\* Facilities and some pipelines are not shown on the map.

\*\* Final pipe lengths are subject to change during construction and/or final design considerations.













## Liquids Pipelines

We are the operator of all of the following pipelines and properties.

	Length	Description	Ownership
<b>Liquids Pipelines</b>			
Keystone Pipeline System	 4,324 km (2,687 miles)	Transports crude oil from Hardisty, Alberta, to U.S. markets at Wood River and Patoka, Illinois, Cushing, Oklahoma, and the U.S. Gulf Coast.	100%
Marketlink		Terminal and pipeline facilities to transport crude oil from the market hub at Cushing, Oklahoma to the U.S. Gulf Coast refining markets on facilities that form part of the Keystone Pipeline System.	100%
Grand Rapids	 460 km (287 miles)	Transports crude oil from the producing area northwest of Fort McMurray, Alberta to the Edmonton/Heartland, Alberta market region.	50%
Northern Courier	 90 km (56 miles)	Transports bitumen and diluent between the Fort Hills mine site and Suncor Energy's terminal located north of Fort McMurray, Alberta.	100%
<b>In Development</b>			
Keystone XL	 1,906 km (1,184 miles)	To transport crude oil from Hardisty, Alberta to Steele City, Nebraska to expand capacity of the Keystone Pipeline System.	100%
Keystone Hardisty Terminal		Crude oil terminal located at Hardisty, Alberta, providing western Canadian producers with crude oil batch accumulation tankage and access to the Keystone Pipeline System.	100%
Bakken Marketlink		To transport crude oil from the Williston Basin producing region in North Dakota and Montana to Cushing, Oklahoma and the U.S. Gulf Coast on facilities that form part of the Keystone Pipeline System.	100%
Heartland Pipeline and TC Terminals	  200 km (125 miles)	Terminal and pipeline facilities to transport crude oil from the Edmonton/Heartland, Alberta region to facilities in Hardisty, Alberta.	100%
White Spruce	 72 km (45 miles)	To transport crude oil from the Canadian Natural Resources Limited's Horizon facility in northeast Alberta into the Grand Rapids pipeline.	100%

## Energy

We are the operator of all of our Energy assets, except for Cartier Wind, Bruce Power and Portlands Energy.

	Generating capacity (MW)	Type of fuel	Description	Ownership
<b>Canadian Power</b> 6,983 MW of power generation capacity (including facilities under construction)				
<b>Western Power</b> 1,021 MW of power generation capacity in Alberta and Arizona				
Bear Creek	 100	natural gas	Cogeneration plant in Grande Prairie, Alberta.	100%
Carseland	 95	natural gas	Cogeneration plant in Carseland, Alberta.	100%
Coolidge	 575	natural gas	Simple-cycle peaking facility in Coolidge, Arizona. Power sold under a 20-year PPA with the Salt River Project Agricultural Improvements & Power District which expires in 2031.	100%
Mackay River	 205	natural gas	Cogeneration plant in Fort McMurray, Alberta.	100%
Redwater	 46	natural gas	Cogeneration plant in Redwater, Alberta.	100%
<b>Eastern Power</b> 2,863 MW of power generation capacity (including facilities under construction)				
Bécancour	 550	natural gas	Cogeneration plant in Trois-Rivières, Québec. Power sold under a 20-year PPA with Hydro-Québec which expires in 2026. Steam sold to an industrial customer. Power generation has been suspended since 2008. We continue to receive capacity payments while generation is suspended.	100%
Cartier Wind	 365 <sup>1</sup>	wind	Five wind power facilities in Gaspésie, Québec. Power sold under 20-year PPAs with Hydro-Québec which expire between 2026 and 2032.	62%
Grandview	 90	natural gas	Cogeneration plant in Saint John, New Brunswick. Power sold under a 20-year tolling agreement for 100 per cent of heat and electricity output with Irving Oil which expires in 2024.	100%
Halton Hills	 683	natural gas	Combined-cycle plant in Halton Hills, Ontario. Power sold under a 20-year Clean Energy Supply contract with the IESO which expires in 2030.	100%
Portlands Energy	 275 <sup>1</sup>	natural gas	Combined-cycle plant in Toronto, Ontario. Power sold under a 20-year Clean Energy Supply contract with the IESO which expires in 2029.	50%
<b>Bruce Power</b> 3,099 MW of power generation capacity				
Bruce Power	 3,099 <sup>1</sup>	nuclear	Eight operating reactors in Tiverton, Ontario. Bruce Power leases the eight nuclear facilities from OPG.	48.5%
<b>Under Construction</b>				
Napanee	 900	natural gas	Combined-cycle plant in Greater Napanee, Ontario. Power sold under a 20-year Clean Energy Supply contract with the IESO which expires 20 years from in-service date. Expected in-service date is fourth quarter 2018.	100%

<sup>1</sup> Our share of power generation capacity.