

2023 Green Bond Impact Report

November 2023



About FortisBC

FortisBC delivers the energy customers need safely, reliably and at a reasonable cost. Whether delivering renewable and low-carbon gases,¹ natural gas, electricity or propane, our more than 2,600 employees serve approximately 1.2 million customers in 135 British Columbia communities and 58 First Nations communities across 150 Traditional Territories.

About the company

We own and operate approximately 51,200 kilometres of gas transmission and distribution lines, and approximately 7,300 kilometres of electricity transmission and distribution lines.

Our energy infrastructure assets also include two liquefied natural gas (LNG) storage facilities, and four hydroelectric generating plants.

FortisBC Inc., our electric utility, and FortisBC Energy Inc., our gas utility, do business as FortisBC. FortisBC is indirectly, wholly owned by Fortis Inc., a leader in the North American regulated electricity and gas utility industry listed on the TSX and NYSE. Through its subsidiaries, Fortis Inc. serves more than 3.4 million gas and electricity customers.

¹ FortisBC uses the term renewable and low-carbon gas to refer collectively to the low-carbon gases or fuels that the utility can acquire under the Greenhouse Gas Reduction (Clean Energy) Regulation, which are: Renewable Natural Gas (also called RNG or biomethane), hydrogen, synthesis gas (from wood waste) and lignin. FortisBC's renewable and low-carbon gas portfolio currently includes only RNG which is produced in a different manner than conventional natural gas. It is derived from biogas, which is produced from decomposing organic waste from landfills, agricultural waste and wastewater from treatment facilities. The biogas is captured and cleaned to create RNG. Other gases and fuels may be added to the program over time. Depending on their source, all of these gases have differing levels of lifecycle carbon intensity (Cl). However, all of these gases are low carbon when compared to the lifecycle Cl of conventional natural gas. The current burner tip Cl of RNG is 0.29 grams of carbon dioxide equivalent per megajoule of energy (gCO₂e/MJ) and the current renewable and low-carbon gas portfolio lifecycle emissions are -22 gCO₂e/MJ. This is below B.C.'s Cl threshold for low-carbon gases of 36.4 gCO₂e/MJ set out in the **2021 B.C. Hydrogen Strategy**.



Leading B.C.'s energy transformation

At FortisBC, we're working with customers, community groups, Indigenous communities, governments and industries to lead B.C.'s transition to a lower-carbon energy future. In 2019, we introduced our Clean Growth Pathway strategy, identifying four significant ways to help reduce our customers' greenhouse gas (GHG) emissions and support provincial climate action targets.



Investing in low- and no-carbon vehicles and transportation infrastructure



Increasing our supply of renewable and low-carbon gases and advancing hydrogen deployment



Establishing B.C. as an LNG centre to help displace higher-carbon fuels locally and globally



Investing in energy efficiency in homes, businesses and industry, and developing innovative energy projects in B.C.'s communities

We're delivering renewable and low-carbon energy through our electricity and gas systems to make a positive contribution towards B.C.'s climate action goals now and in the future.

At FortisBC, we've always worked to protect the environment-whether by helping customers reduce their GHG emissions, lowering our own operational GHG emissions or implementing new environmental protections. We're using both our gas and electricity systems to progress towards a lower-carbon energy future.

In 2022, we helped our customers avoid approximately 776,000 tonnes of carbon dioxide equivalent (tCO_2e), the annual emissions equivalent of almost 238,000 gasoline powered automobiles. This has been the highest emissions avoided we have ever reported since we began tracking our Clean Growth Pathway progress in 2020 and an improvement of 34 per cent from 2021.

More than half of the emissions avoided in 2022 were achieved through enabling customers to switch to higher-efficiency heating equipment and other energy-efficiency measures installed through FortisBC's rebates and incentives, covering everything from high-efficiency furnaces to industrial process improvements.

We also continue to increase RNG volumes and advance the deployment of other low-carbon gases such as hydrogen. By the end of 2022, our maximum contracted annual RNG supply was just over five per cent of the gas delivered through our distribution system. Renewable and lowcarbon gases are instrumental in reducing GHG emissions effectively and affordably while ensuring we have a resilient and diversified energy system for our customers.

A message from our CFO



FortisBC is leading the clean energy transformation as we set out to help achieve provincial climate action goals for a cleaner energy future.

As the largest energy provider in the province, we understand the role we play in reducing GHG emissions while providing our customers with safe and reliable energy they can depend on.

The success of our second Green Bond issuance in November 2022 supported initiatives outlined in our <u>Clean Growth Pathway</u>-our strategy to help our customers reduce their GHG emissions. These initiatives will help to decarbonize the gas system, provide alternative energy solutions for transportation and support customers in improving the energy efficiency of their homes and businesses.

A key area this Green Bond supported is the growth and development of RNG. By replacing more conventional natural gas with low-carbon RNG, we can help decarbonize the gas system. Increasing our supply of RNG will play a critical role in how we can help achieve provincial climate action goals while helping advance a lower-carbon energy future. We've continued to make great strides in progressing this goal by working with local and out-of-province suppliers to create RNG. A portion of this Green Bond was allocated to the RNG facility under development at the City of Vancouver's landfill and, once complete, will be the largest RNG facility in the province.

Looking forward, FortisBC has an important role to play in helping transform B.C.'s clean energy future. We thank the investors for their continued support with our second Green Bond and look forward to future opportunities together.

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lan Lorimer, Chief financial officer

FortisBC's Green Bond program

In 2020, we developed a dedicated **FortisBC Green Bond Framework** that follows the same fundamental principles as our **Clean Growth Pathway to 2050**.



FortisBC's Green Bond Framework aligns with the 2018 International Capital Market Association's Green Bond Principles. It received a <u>second-party</u> <u>opinion</u> from CICERO Shades of Green.

Use of proceeds

FortisBC's Green Bond Framework comprises five eligible project categories (the Eligible Projects). Renewable Natural Gas, energy efficiency, pollution prevention and control, and hydrogen projects allowed under renewable energy are categories that pertain to projects and activities at our gas utility, FortisBC Energy Inc., which issued the 2020 and 2022 Green Bonds. The clean transportation and renewable energy categories (with the exception of hydrogen) pertain to projects and activities at other FortisBC entities.

Eligible Projects may include expenditures incurred by the issuing entity within 36 months preceding the date of the Green Bond issuance. FortisBC is committed to fully allocating the net proceeds of a Green Bond within 24 months of issuance.

Project selection

The evaluation and selection of Eligible Projects was the responsibility of the selection committee, which was comprised of individuals from the finance department and the sustainability department. The decision as to the selection of the Eligible Projects was unanimous. This process was completed in consultation with FortisBC's internal business units.

Verification

FortisBC's internal audit group provided assurance on the use of proceeds. Internal audit issued an unqualified audit report for both our 2020 and 2022 Green Bonds.

Eligibility criteria



² When compared to gasoline, diesel or conventional marine fuel powered vehicles and vessels.

FortisBC's Green Bond summaries

	2020 Green Bond	2022 Green Bond
Highlights of the issuance	On July 9, 2020, FortisBC Energy Inc. priced a successful \$200 million inaugural Green Bond, representing the first Green Bond issued by a gas utility in Canada.	On November 23, 2022, FortisBC Energy Inc. successfully priced and issued a \$150 million Green Bond, which is FortisBC's second and final Green Bond under its 2020 Green Bond Framework.
lssuance term	A 30-year Green Bond was priced at an all-in coupon of 2.54 per cent, payable semi-annually until maturity on July 13, 2050.	A 30-year Green Bond was priced at an all-in coupon of 4.67 per cent, payable semi-annually until maturity on November 28, 2052.
Investor demand	The offering was broadly distributed between 56 buyers with green investors representing 86 per cent of the final book.	The offering was broadly distributed between 55 buyers with green investors representing 91 per cent of the final book.
Allocation of funds	The majority of proceeds were allocated towards Eligible Project expenditures incurred in the 36 months prior to the issuance.	All proceeds were allocated towards Eligible Project expenditures incurred in the 23 months prior to the issuance.
Release of funds	The net proceeds from the issuance amounted to \$199 million and were maintained in a restricted bank account. From July 2020 to December 2020, 100 per cent of the net proceeds of this bond issuance were released from the restricted account, representing funds invested in Eligible Projects.	The net proceeds from the issuance amounted to \$149 million and were maintained in a restricted bank account. In November 2022, 100 per cent of the net proceeds of this bond issuance were released from the restricted account, representing funds invested in Eligible Projects.
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FortisBC's Green Bond portfolio overview

Both the 2020 and 2022 Green Bonds were issued under our Green Bond Framework published in 2020. The 2022 Green Bond issuance represents the final issuance under this Green Bond Framework.

Category	2020 Green Bond amount allocated \$'000	2022 Green Bond amount allocated \$'000	Total funds allocated \$'000
Energy efficiency	176,955	124,493	301,448
Pollution prevention and control	14,930	10,750	25,680
Renewable Natural Gas	7,115	14,007	21,122
Total net proceeds allocated	199,000	149,250	348,250
	100% allocated 89% 7%	100% allocated 83% 7% 10%	

FortisBC's Green Bond program

Impact of FortisBC Green Bonds and Green Bond projects

The following section summarizes the environmental impact of our 2020 and 2022 Green Bonds by Eligible Project category. Impact metrics have been selected from the 2018 Harmonized Framework for Impact Reporting, where applicable, or from peer Green Bond impact reports. All GHG emissions savings values are calculated using lifecycle CI values.

	DSM initiatives	Green Bond amount allocated (\$'000)	Green Bond-funded annual GHG emissions avoided³ (tCO₂e)	Green Bond-funded lifetime GHG emissions avoided³ (tCO₂e)	Green Bond-funded NPV* of annual gas savings (GJ)
	2020 Green Bond	176,955	140,111	1,313,976	21,972,863
Energy	2022 Green Bond	124,493	94,317	961,287	14,136,574
enciency	TOTAL	301,448	234,428	2,275,263	36,109,437
UN SDGs⁴	7 Alternet of a State	 SDG 7: Affordable and clean energy SDG 8: Decent work and economic growth SDG 9: Industry, innovation and infrastru 	h cture		* Net Present Value (NPV).

Pollution prevention	LNG marine vessel incentives and on-road NGT incentives [*]	Green Bond amount allocated (\$'000) G	Green Bond-funded annual HG emissions avoided³ (tCO₂e)	Green Bond-funded lifetime GHG emissions avoided ³ (tCO ₂ e)	Green Bond-funded reduction of NOx and SOx (tonnes)
	2020 Green Bond	14,930	27,341	423,478	1,835
	2022 Green Bond	10,750	17,030	215,579	1,077
control	TOTAL	25,680	44,371	639,057	2,912
UN SDGs⁴	3 ADD WILLIAMS	 SDG 3: Good health and well-being SDG 11: Sustainable cities and communities SDG 12: Responsible consumption and proceedings 	* 2022 Green Bond fur were allocated to bot duction incentives.	nds were invested in LNG marine vessel incentive In the LNG marine vessel incentives and on-road	es only. In 2020, Green Bond funds natural gas for transportation (NGT)

Renewable Natural Gas	Salmon Arm, Kelowna, City of Vancouver and Hartland landfills [*]	Green Bond amount allocated (\$'000) G	Green Bond-funded annual HG emissions avoided³ (tCO₂e)	Green Bond-funded lif GHG emissions avoided ³	etime Green Bond-funded energy (tCO2e) generated from RNG (GJ)
	2020 Green Bond	7,115	762	14,500	355,735
	2022 Green Bond	14,007	2,952	62,228	1,071,159
	TOTAL	21,122	3,714	76,728	1,426,894
UN SDGs⁴	7 artistenet and the interview 11 activities and 11 activities and	 SDG 7: Affordable and clean energy SDG 8: Decent work and economic SDG 9: Industry, innovation and in 	gy • SDG 11: Sustainable of c growth * 2020 and 2022 Gree allocated to Salmon	cities and communities en Bond funds were Arm, Kelowna and City of	Vancouver landfills. 2022 Green Bond funds were also allocated to the Hartland Landfill.

³ 2022 Green Bond figures are reported on an Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) global warming potential (GWP) basis utilizing Government of Canada Clean Fuel Regulations and GHGenius. 2020 Green Bond figures were reported on a Fourth Assessment Report (AR4) basis. ⁴ United Nations Sustainable Development Goals (SDG) that were adopted by all United Nations in 2015 as a universal call to action to end poverty, protect the planet and ensure that by 2030 all people enjoy peace and prosperity.



DSM initiatives

Project	2022 Green Bond amount allocated (\$'000)	2022 Green Bond-funded annual GHG emissions avoided (tCO2e)	2022 Green Bond-funded lifetime GHG emissions avoided (tCO2e)	2022 Green Bond-funded NPV of annual gas savings (GJ)
2020 DSM⁵	19,049	17,643	135,599	1,994,105
2021 DSM	105,444	76,674	825,688	12,142,469
Total DSM initiatives	124,493	94,317	961,287	14,136,574

Methodology: Emissions avoided and NPV of annual gas savings were sourced from FortisBC Energy Inc.'s DSM annual filings to the British Columbia Utilities Commission (BCUC) that were reported on an AR4 basis. These figures were then adjusted to convert to AR5 utilizing Government of Canada Clean Fuel Regulations.

Investing in energy efficiency programs is one of the ways FortisBC is taking the lead in transforming B.C.'s energy future, making progress towards B.C.'s climate action goals and offering its customers practical and affordable options for reducing their emissions.

Our rebate programs help customers complete energy-efficiency projects, such as upgrading to higher-efficiency equipment (e.g. furnaces, boilers and water heaters), replacing insulation, and making industrial processes more efficient. Over time these projects will help customers achieve significant energy savings. We also provide our customers with information to help them understand their homes' or business' energy needs and tips to help them manage their energy use.

The majority of our 2022 Green Bond funds were allocated to DSM expenditures incurred in 2021. In that year, FortisBC Energy Inc. invested close to \$107 million in energy efficiency and conservation programs-a

record breaking year for FortisBC and also the second year in a row we surpassed our goal of helping our customers achieve more than a million gigajoules (GJ) of annual gas savings.

More than 80 per cent of our 2021 DSM expenditures represented rebates and almost half of the funding allocated to the 2022 Green Bond was provided to our residential customers:



⁵ Only includes eligible expenditures for the month of December. The expenditures for the first 11 months of 2020 were allocated to our 2020 Green Bond.

2022 Green Bond allocation Pollution prevention and control

LNG marine vessel incentives

Project	2022 Green Bond	2022 Green Bond-funded	2022 Green Bond-funded	2022 Green Bond-funded	2022 Green Bond-funded
	amount allocated	annual GHG emissions	lifetime GHG emissions	forecast project	forecast reduction of
	(\$'000)	avoided (tCO2e)	avoided (tCO₂e)	energy (GJ)	NOx and SOx (tonnes)
LNG marine vessel incentives	10,750	17,030	215,579	7,843,021	1,077

Methodology: Emissions avoided is calculated using the CI differential between LNG and marine diesel fuel and reported on an AR5 basis utilizing Government of Canada Clean Fuel Regulations and GHGenius. It uses the total fuel commitment volumes of LNG as per the LNG incentive contracts signed with Seaspan and BC Ferries. Forecast project energy is the total forecasted volume of LNG committed for the contract term of the Green Bond-funded marine vessels. Forecast reduction of NOx and SOx is calculated based on the Argonne National Laboratory GREET model.

Switching to LNG from traditional marine fuels reduces lifecycle GHG emissions by up to 27 per cent and fuelling costs by more than half.^{6,7}

The marine vessel incentive program offers funding support to help cover the incremental cost of upgrading to an LNG-powered vessel, compared to the equivalent vessel operating on conventional marine fuel (diesel).



Since inception, our marine vessel incentive program has granted a total of \$24 million of incentives to Seaspan and BC Ferries supporting 10 local LNG vessels and directly contributing to lowering emissions and improving air quality here in B.C. These vessels include ferries that transport passengers and vital supplies from the Lower Mainland of British Columbia to Vancouver Island.

Our two LNG facilities in Delta⁸ and Ladysmith are key not only to system resiliency but also to supplying natural gas to fuel local truck fleets and marine vessels. Since the beginning of our truck-to-ship fuelling program, we have completed more than 6,000 marine bunkering events.

Continued switching to LNG fuels for marine vessels locally is key to reducing our customers' GHG emissions to support provincial climate action targets. In 2022, we helped our customers avoid





GHG emissions by using LNG in marine bunkering.

 $\ \ ^{6} https://www.fortisbc.com/about-us/climate-leadership/sustainability/our-progress-towards-reducing-ghg-emissions$

⁷ https://www.fortisbc.com/est/marine/save-money-with-bcs-Ing-for-marine-vessels

 $\label{eq:linear} {}^{s} \ https://talkingenergy.ca/project/tilbury-LNG-expansion-project$

2022 Green Bond allocation Renewable Natural Gas

Project	2022 Green Bond	2022 Green Bond-funded	2022 Green Bond-funded	2022 Green Bond-funded
	amount allocated	annual GHG emissions	lifetime GHG emissions	forecast project energy
	(\$'000)	avoided (tCO₂e)	avoided (tCO₂e)	generated from RNG (GJ)
Salmon Arm, Kelowna, City of Vancouver and Hartland landfills	14,007	2,952	62,228	1,071,159

Methodology: Emissions avoided is calculated using the CI differential between conventional natural gas and each RNG project and reported on an AR5 basis utilizing Government of Canada Clean Fuel Regulations and GHGenius. Emissions avoided and forecast project energy are based on the minimum annual contract volumes for each RNG site. Forecast project energy is the total minimum forecasted volume of RNG based on the committed contract term for the Green Bond-funded RNG projects.

Our investment in local, British Columbia RNG facilities is an important component of our strategy to grow our renewable and low-carbon gas supply to at least 15 per cent by 2030.



Renewable Natural Gas is made from organic waste produced by everyday activities. As organic matter, such as food or cow manure, decomposes, it releases methane. Instead of releasing the methane into the atmosphere and contributing to GHG emissions, RNG facilities capture that methane and purify it to make RNG. This RNG can be added into our existing distribution network alongside conventional natural gas and it functions the same in all applications.

We are committed to displacing conventional natural gas in our gas system with renewable and low-carbon gases and are working with the evolving regulatory and market landscape and our customers to accomplish this.

Under our proposed plan submitted to the BCUC, if approved, new homes connecting to the gas system would automatically be signed up for an RNG allocation and all existing residential and small commercial customers would start to receive a percentage of their gas as RNG. In 2022, we increased contracted annual RNG supply. At maximum contracted volume, our 12 suppliers could deliver almost



2022 Green Bond allocation Renewable Natural Gas

Project	2022 Green Bond amount allocated:	Brief description
	\$10.6 million	The City of Vancouver's landfill RNG facility is under development and upon completion will be FortisBC's largest owned RNG project to date. This facility has been partially funded by both 2020 and 2022 Green Bonds.
City of Vancouver		The project is located in Delta, B.C. at the landfill owned and operated by the City of Vancouver. The project will consist of connecting to the existing landfill gas collection system, installing an upgrading plant and connecting to the existing FortisBC gas distribution infrastructure through an interconnect station.
landfill RNG facility		The City of Vancouver will be responsible for facilities necessary to collect the raw biogas at the landfill and FortisBC will be responsible for upgrading the landfill gas, the interconnection, compression and pipeline necessary to inject the RNG into the FortisBC gas distribution system.
		Since our November 2022 Green Bond issuance, the project has had its construction contract awarded and site works have commenced.
		The Kelowna landfill's RNG facility has been under contract since 2012 and operating since 2015. This facility has been partially funded by both 2020 and 2022 Green Bonds.
Kelowna landfill RNG facility	\$2.0 million	At the Glenmore Landfill in Kelowna B.C., biogas that is created from landfill waste is captured and cleaned so it can be injected into the local gas distribution system. FortisBC owns and operates the biogas upgrading plant, working in cooperation with the City of Kelowna.
		In 2022, FortisBC installed a new sulfur removal system that is more reliable, easier to operate and is expected to improve the life of the facility. A thermal oxidizer was also installed that has resulted in lower total emissions.

2022 Green Bond allocation Renewable Natural Gas

Project	2022 Green Bond amount allocated:	Brief description
	\$0.9 million	The Hartland Landfill RNG facility is currently under construction. This project was not funded by Green Bond proceeds raised in 2020.
Hartland Landfill RNG facility		The project is located in Victoria, B.C., at the Hartland Landfill owned by Capital Regional District. Capital Regional District has contracted Hartland Renewable Resource Group, a subsidiary of Waga Energy, to design, build and operate a facility that will upgrade the biogas generated at the landfill to RNG.
		FortisBC will be responsible for the interconnection station to the existing gas system. Once complete the project is expected to produce an average of 200,000 GJ of RNG annually, helping our customers reduce their GHG emissions.
		The Salmon Arm Landfill RNG facility is the longest running FortisBC-owned RNG facility and has been operational since 2012. This facility has been partially funded by both 2020 and 2022 Green Bonds.
Salmon Arm Landfill RNG facility	\$0.5 million	FortisBC partners with Columbia Shuswap Regional District to purchase raw biogas and invest in upgrading equipment, along with the distribution main and interconnection facilities. Activities performed on site include quality monitoring, pressure regulation and odorizing and converting this raw landfill gas into pipeline- quality RNG. This RNG is then delivered to the FortisBC gas distribution system for distribution to homes and businesses in Salmon Arm.
		We continue to invest in plant improvements to reduce the facility's GHG emissions.
Total	\$14.0 million	

Appendices

Key assumptions and approach

Ex-ante projections:

Estimates for target results represent ex-ante projections of expected results once projects are at normal operating capacity. The impact report serves as an illustration of expected results made possible through Green Bond Eligible Projects, but it is not intended to and does not provide actual results achieved in a specific year or reporting period. Target results have been updated with actual results at project completion when feasible. Where the amounts are based on actual results this is noted in the discussion of the impact.

Co-financed projects:

Through various incentive programs, FortisBC co-finances projects with customers for energy-efficient upgrades. The results from these projects or portfolio of projects are based on the entire project including customer financing.

Partial project eligibility:

In cases where a project or portfolio of projects is only partially Green Bond-eligible, the allocated amount reported reflects only that portion that is Green Bond-eligible. Allocations to support disbursements of funds to partially Eligible Projects are made on a pro rata basis.

All reported results are from publicly available sources:

Impact reporting is based on publicly available impacts for the projects or portfolios of projects.

Period of reporting:

Allocation of proceeds is reported up to the date of this report. Impacts are reported based on calendar years to line up with other FortisBC public reporting.

Currency of reporting:

All dollars are in Canadian funds unless otherwise noted.

Appendices Forward-looking information

FortisBC Inc. and FortisBC Energy Inc. do business as FortisBC. The companies are indirect, wholly owned subsidiaries of Fortis Inc. FortisBC uses the FortisBC name and logo under license from Fortis Inc.

Certain statements contained in this report contain forward-looking information within the meaning of applicable securities laws in Canada ("forward-looking information"). The purpose of the forward-looking information is to provide management's expectations regarding results of operations, performance, business prospects and opportunities, and it may not be appropriate for other purposes. All forward-looking information is given pursuant to the safe harbour provisions of applicable Canadian securities legislation.

The forward-looking information in this report includes, but is not limited to, FortisBC's vision that efficiency and conservation will lead to lowered energy requirements and emissions; FortisBC's plans to increase RNG supply; FortisBC's plans to reduce GHG emissions; 2022 Green Bond-funded forecast GHG emissions avoided by various projects, including the Hartland Landfill RNG facility; 2022 Green Bond-funded forecast energy generated from various RNG projects; 2022 Green Bond-funded forecast energy supplied by and forecast reduction of NOx and SOx as a result of the LNG marine vessel incentives program; and innovations and investments in biogas supply, carbon capture technology and low-carbon vehicles. The forward-looking information reflects management's current beliefs and is based on assumptions developed using information currently available to FortisBC's management. Although FortisBC believes that the forward-looking statements are based on information and assumptions that are current, reasonable and complete, these statements are necessarily subject to a variety of risks and uncertainties.

For additional information on risk factors that have the potential to affect FortisBC, reference should be made to FortisBC's continuous disclosure materials filed from time to time with Canadian securities regulatory authorities and to the heading "Business Risk Management" in FortisBC's annual and quarterly Management Discussion and Analysis.

Except as required by law, FortisBC undertakes no obligation to revise or update any forward-looking information as a result of new information, future events or otherwise after the date hereof.

All forward-looking information in this report and the information incorporated in this report by reference is qualified in its entirety by this cautionary statement. This report is provided for information purposes only and does not constitute an offer to sell, or solicitation of an offer to buy, any securities of FortisBC in any jurisdiction.

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